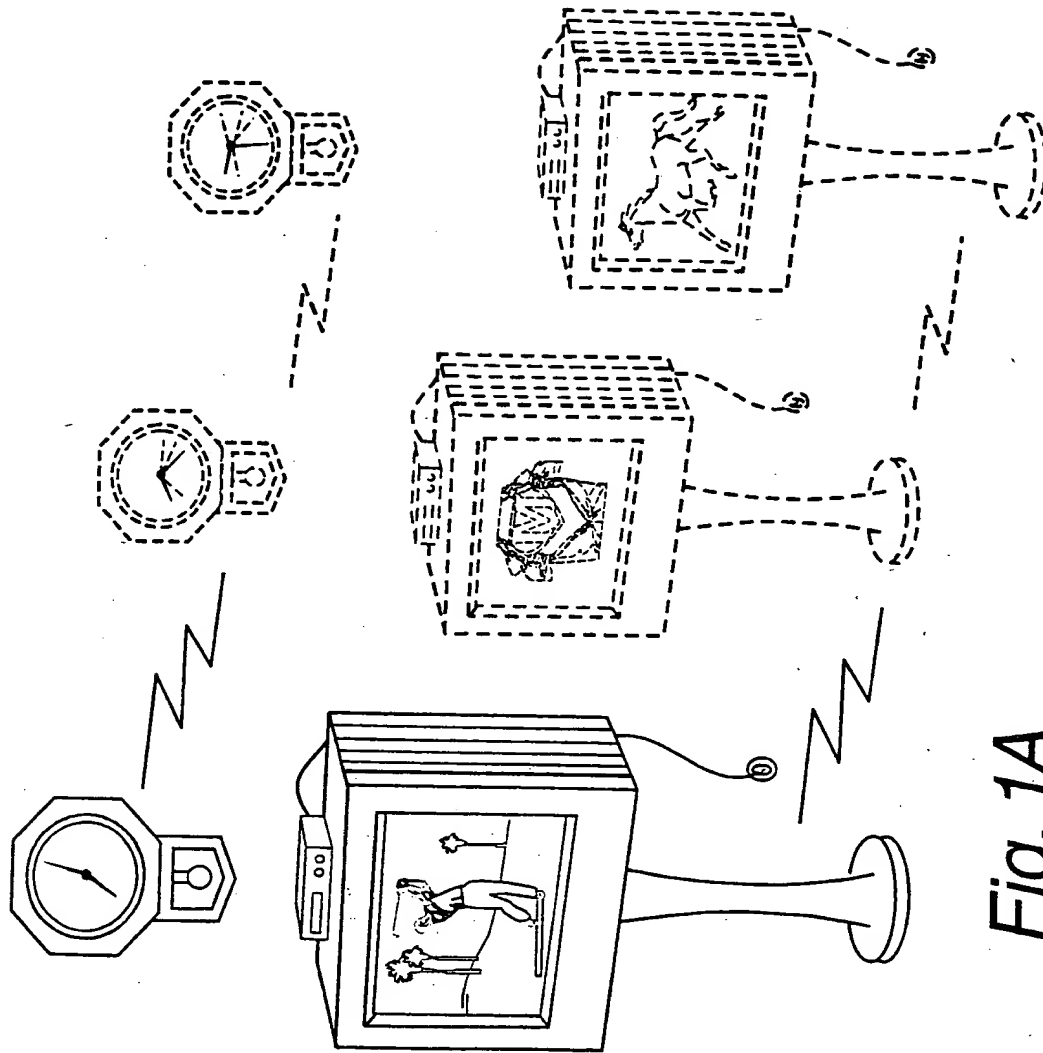
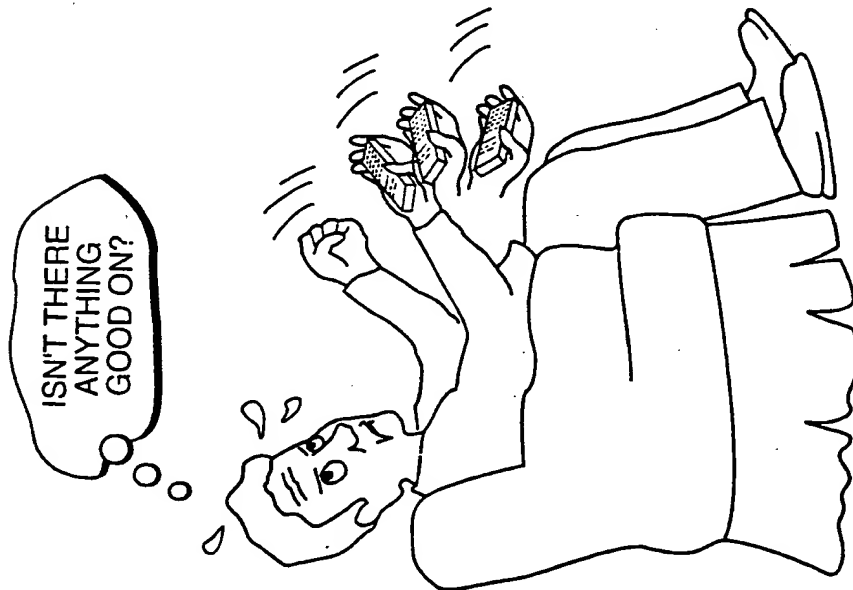


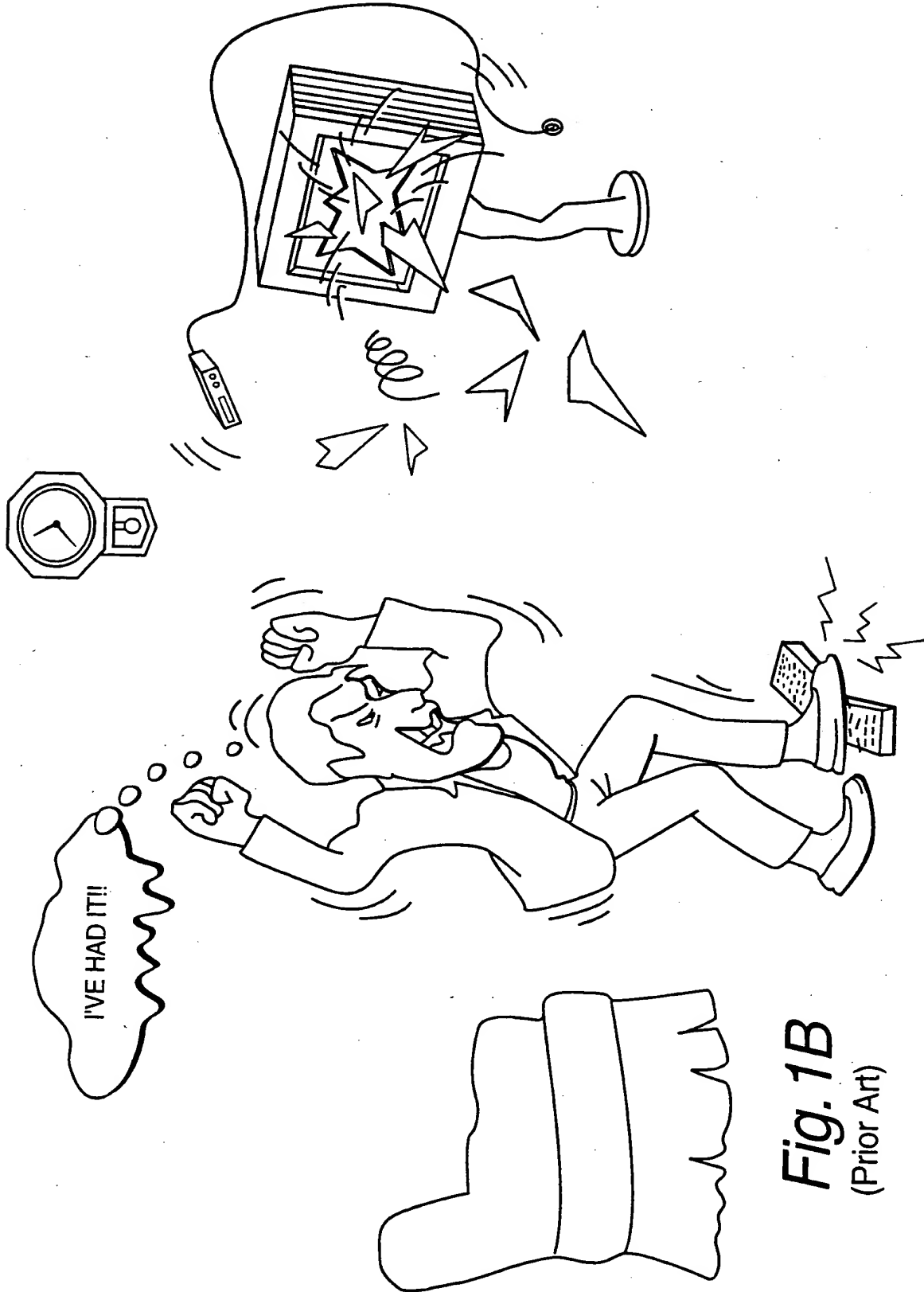
APPROVED	O.G. FIG. 51	
BY	CLASS	SUBCLASS
DRAFTSMAN	705	67



**Fig. 1A**  
(Prior Art)

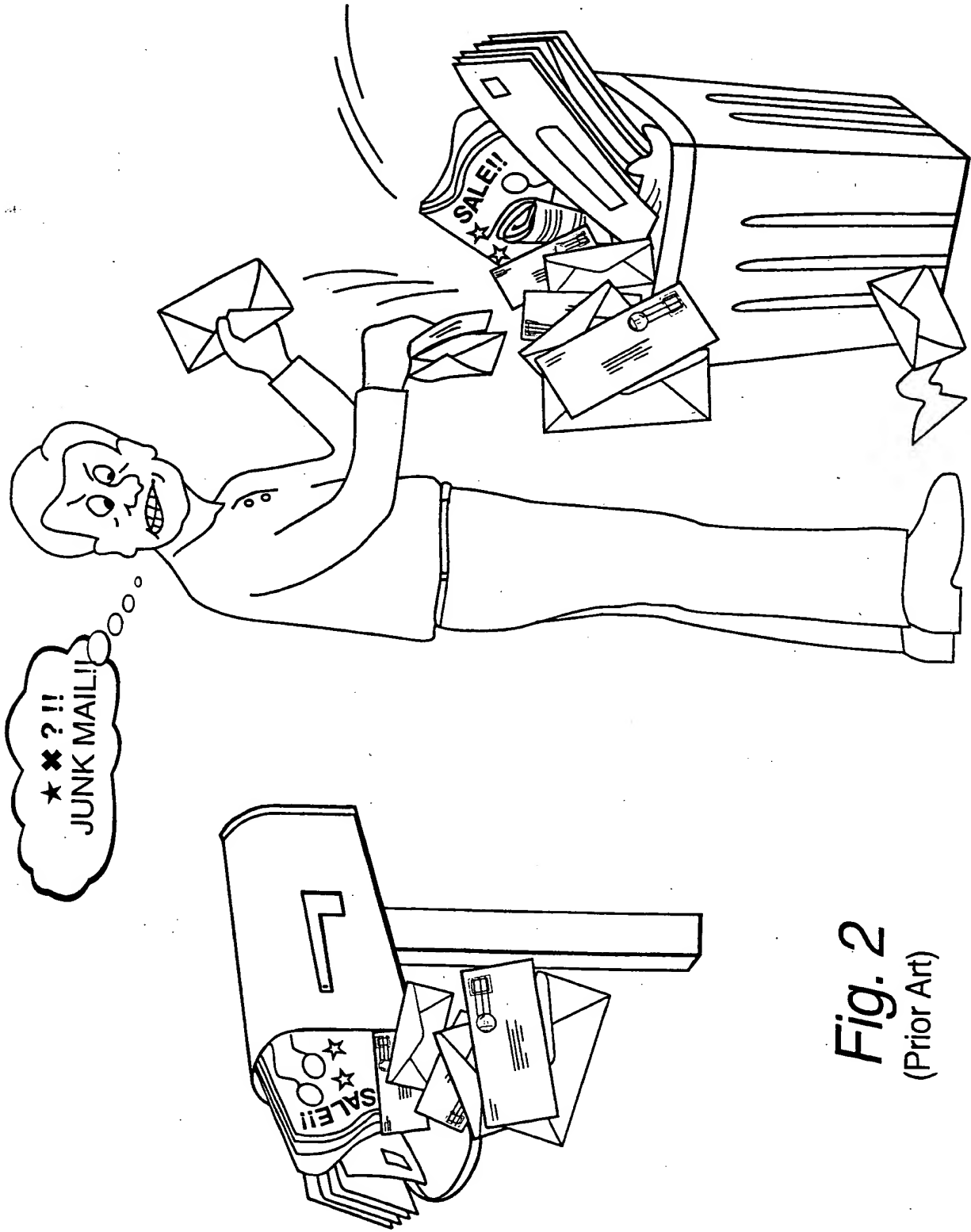


APPROVED	O.G. FIG.	
BY	CLASS	SUBCLASS
DRAFTSMAN		



**Fig. 1B**  
(Prior Art)

APPROVED	O.G. FIG.	
BY	CLASS	SUBCLASS
DRAFTSMAN		



**Fig. 2**  
(Prior Art)

000020\*69660600

APPROVED	O.G. FIG.	
BY	CLASS	SUBCLASS
DRAFTSMAN		

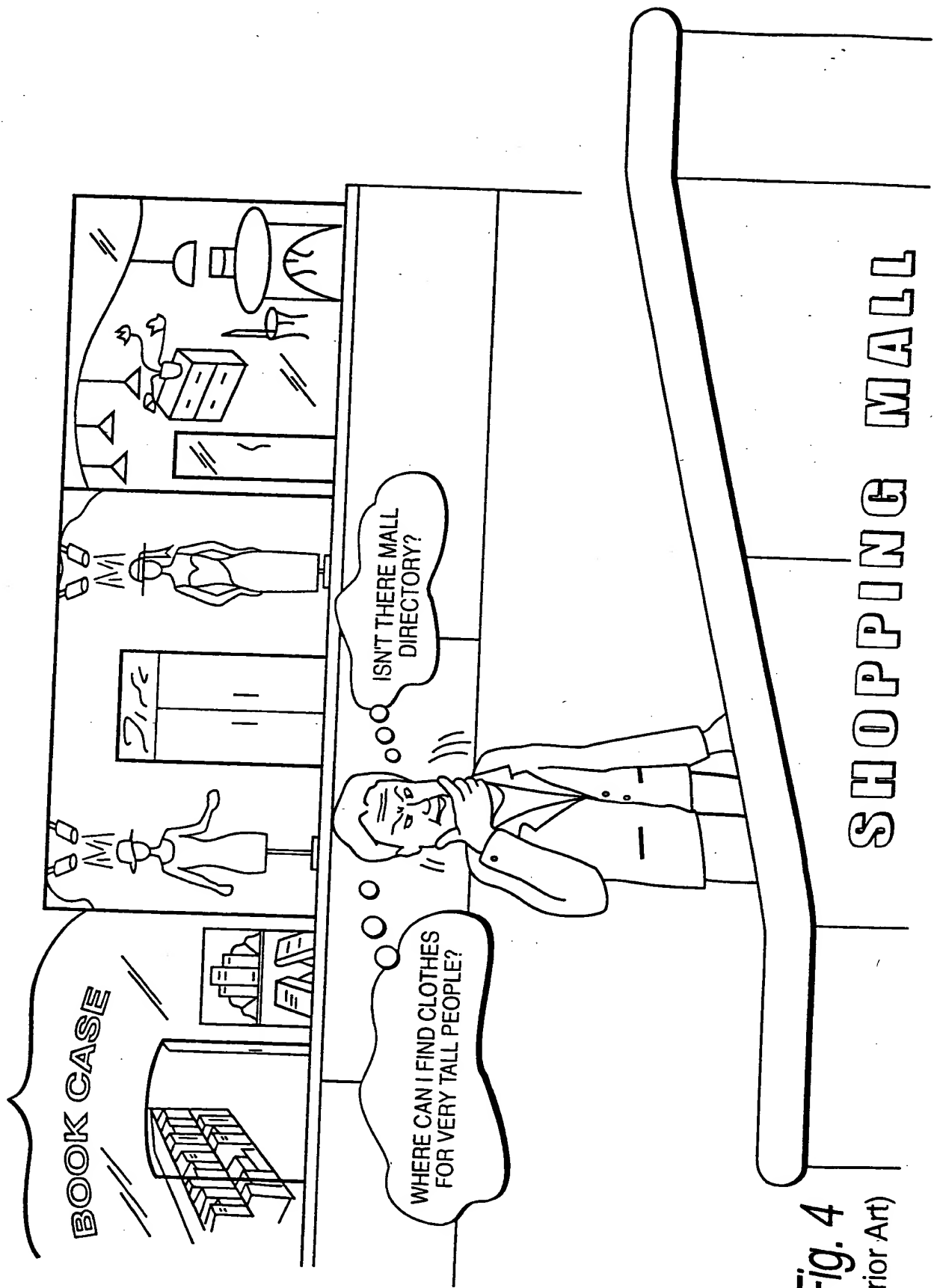
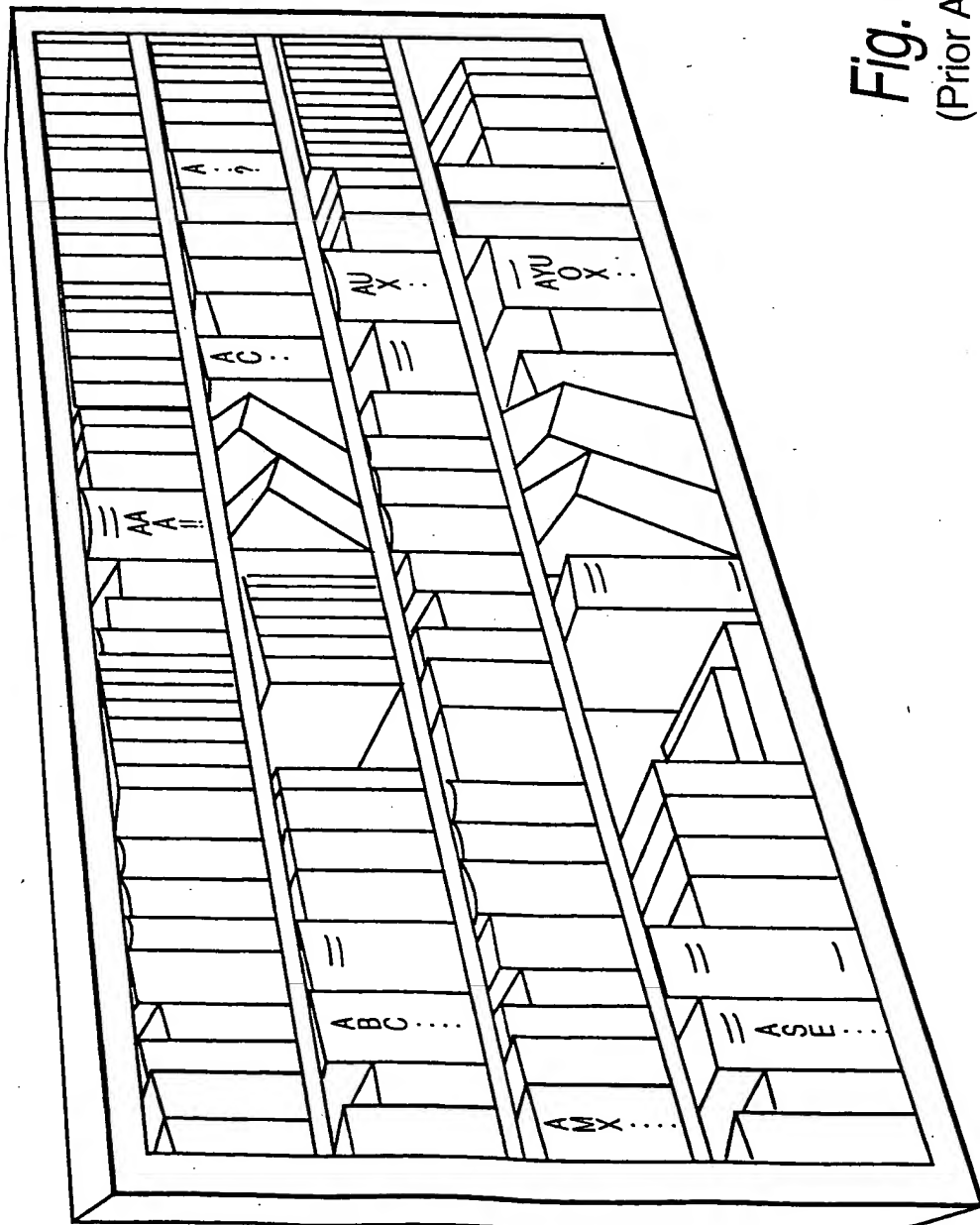
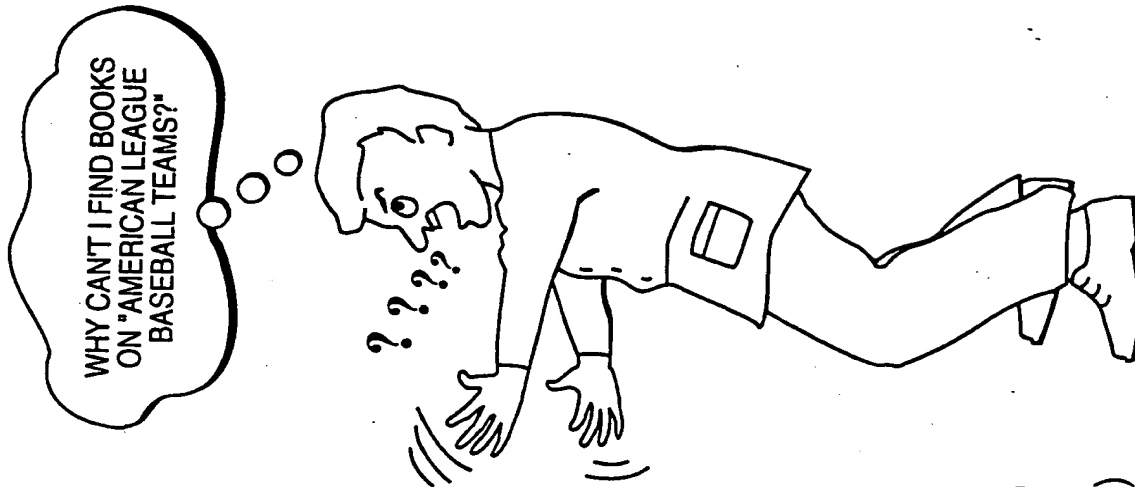


Fig. 4  
(Prior Art)

APPROVED	O.G. FIG.	
BY	CLASS	SUBCLASS
DRAFTSMAN		



**Fig. 3**  
(Prior Art)

APPROVED	O.G. FIG.	
BY	CLASS	SUBCLASS
DRAFTSMAN		

001020 69266160

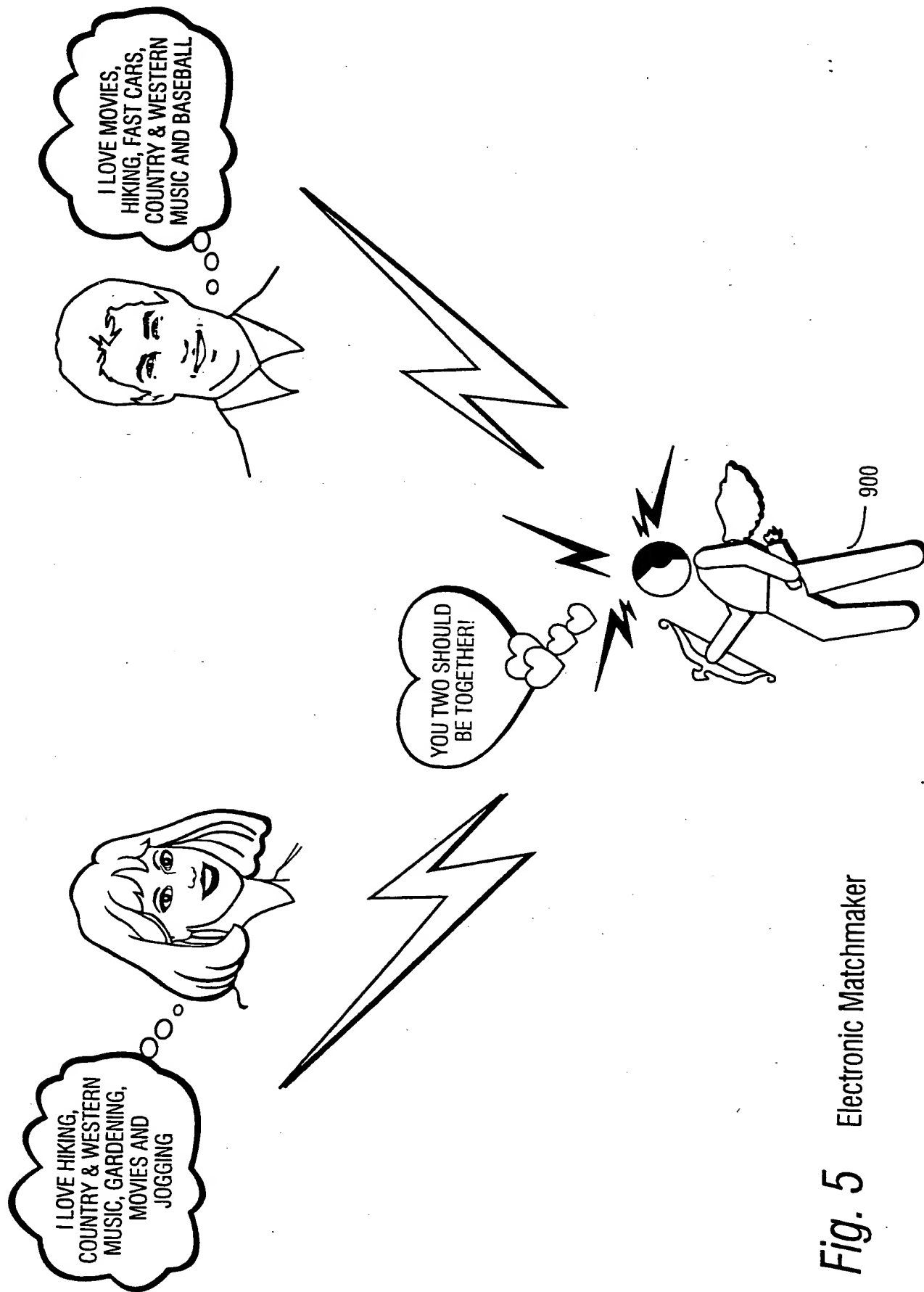
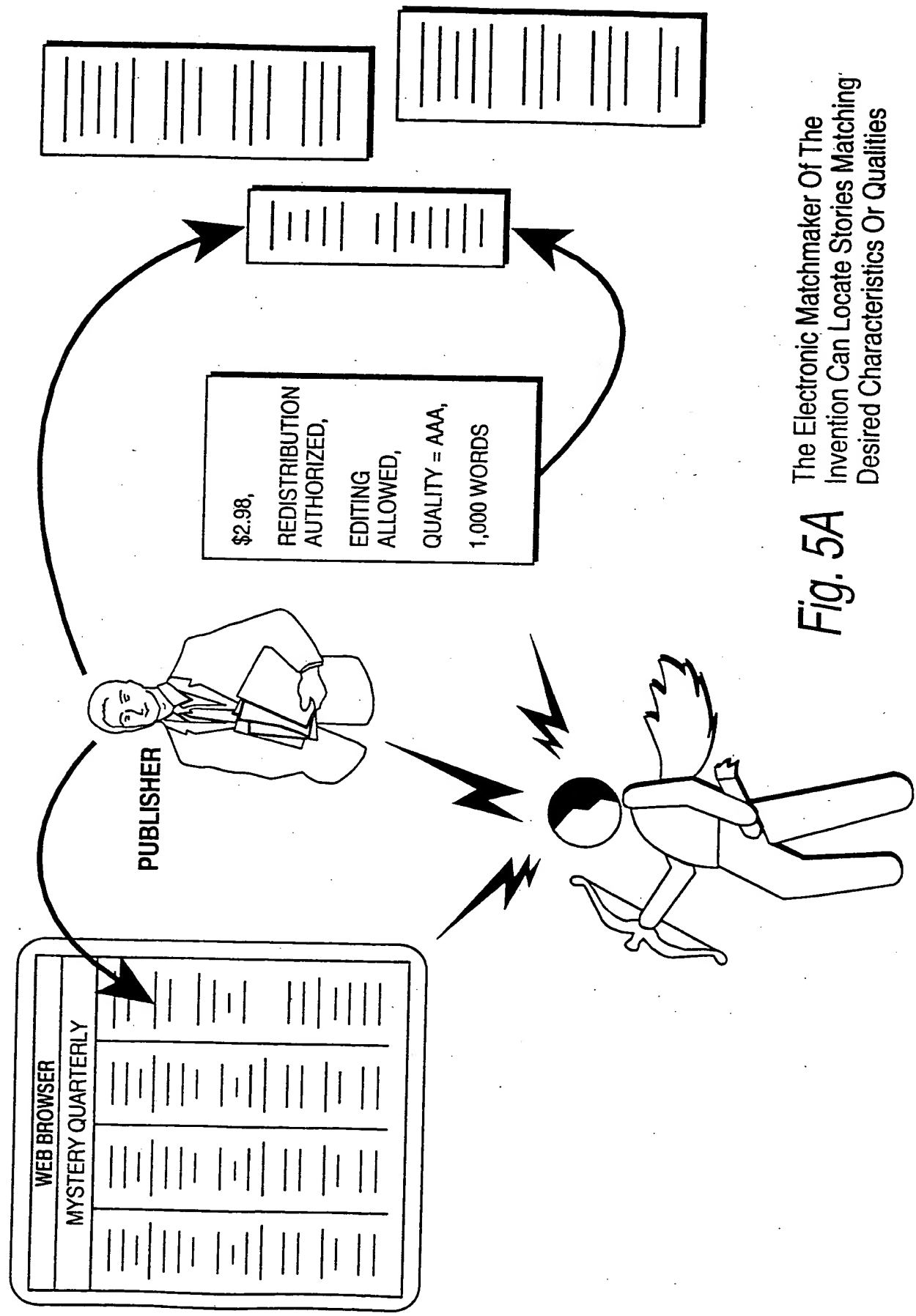


Fig. 5 Electronic Matchmaker

001020\* 69266160

APPROVED	U.G. FIG.	
BY	CLASS	SUBCLASS
DRAFTSMAN		



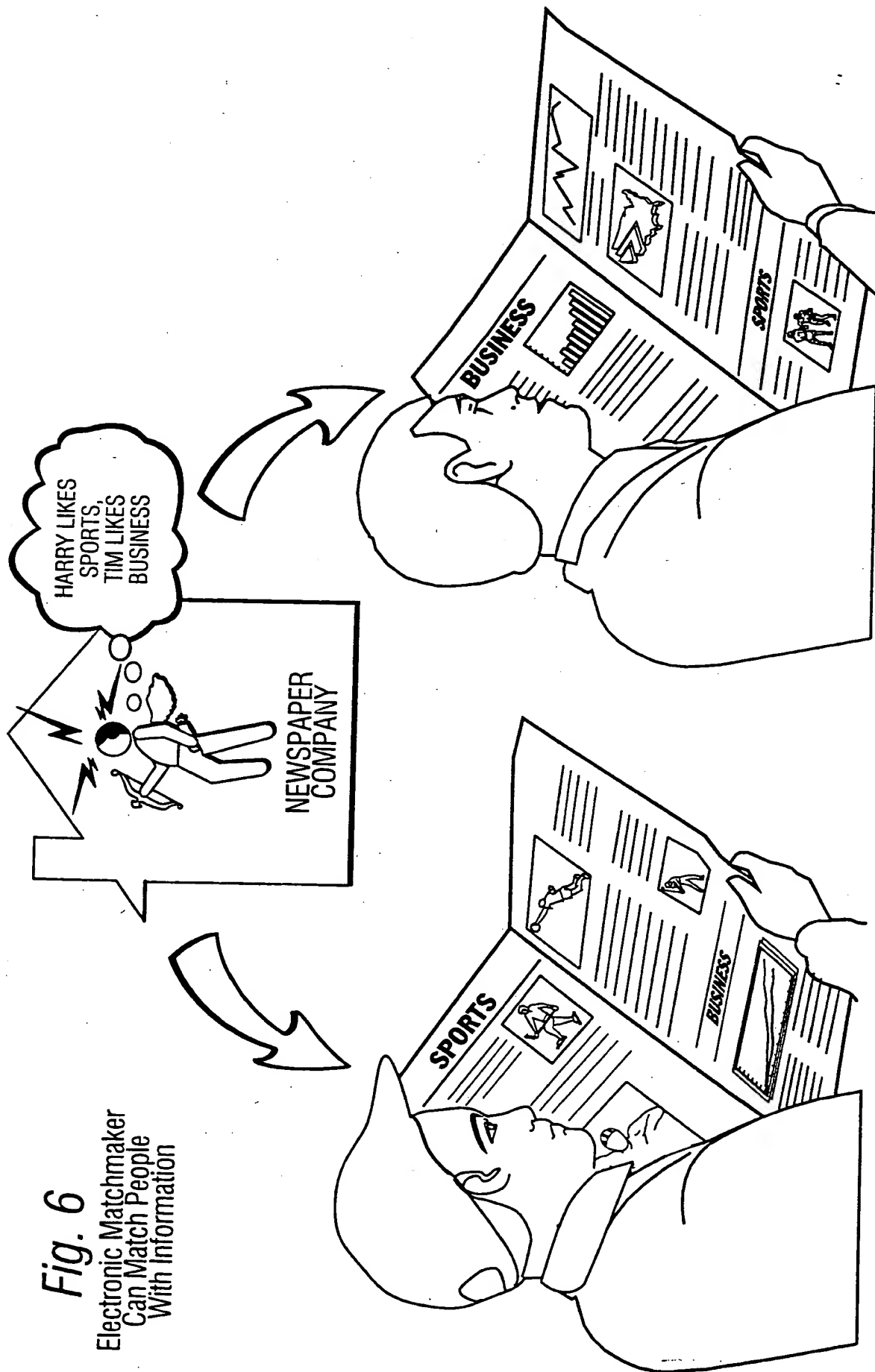
**Fig. 5A**  
The Electronic Matchmaker Of The  
Invention Can Locate Stories Matching  
Desired Characteristics Or Qualities





001020\*69266460




APPROVED	O.G. FIG.	
BY	CLASS	SUBCLASS
DRAFTSMAN		

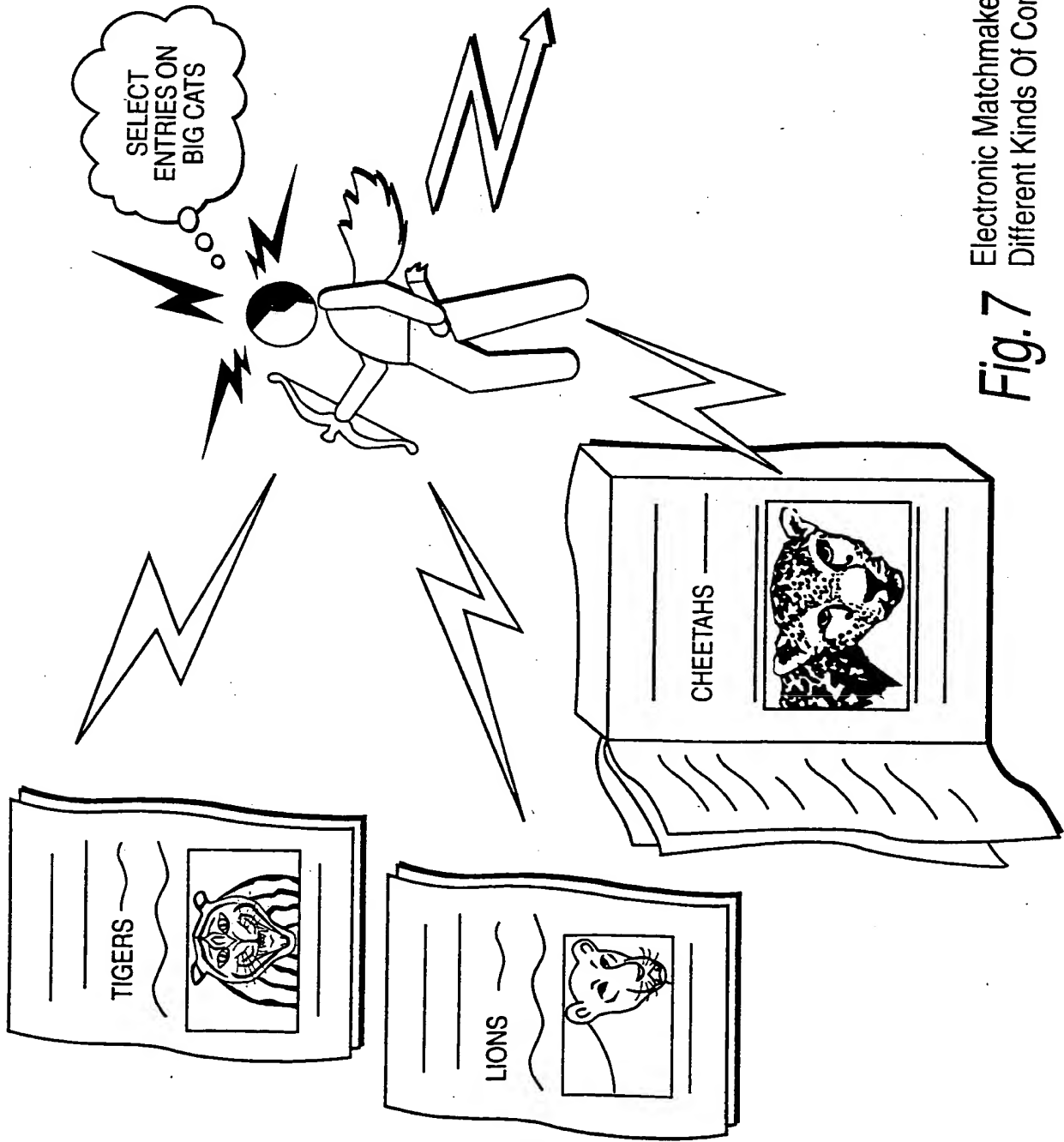


**Fig. 6**  
Electronic Matchmaker  
Can Match People  
With Information

000020-69286160

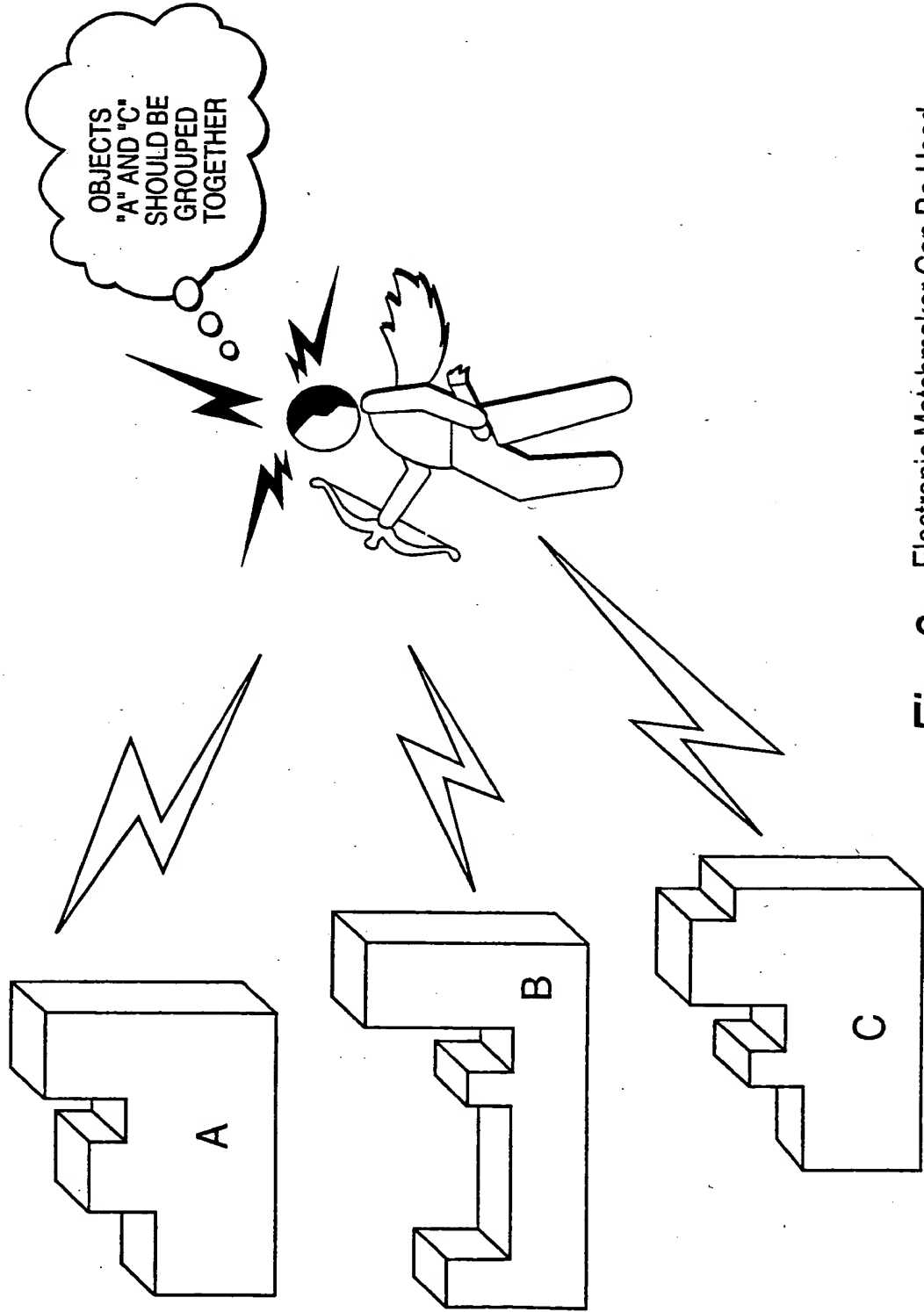
APPROVED	O.G. FIG.	
BY	CLASS	SUBCLASS
DRAFTSMAN		

<b>BIG CATS</b>	_____
	_____
	_____
	_____
<b>TIGERS</b>	
_____	_____
_____	_____
_____	_____
<b>LIONS</b>	
_____	_____
_____	_____
_____	_____
<b>CHEETAHS</b>	
_____	_____
_____	_____
_____	_____

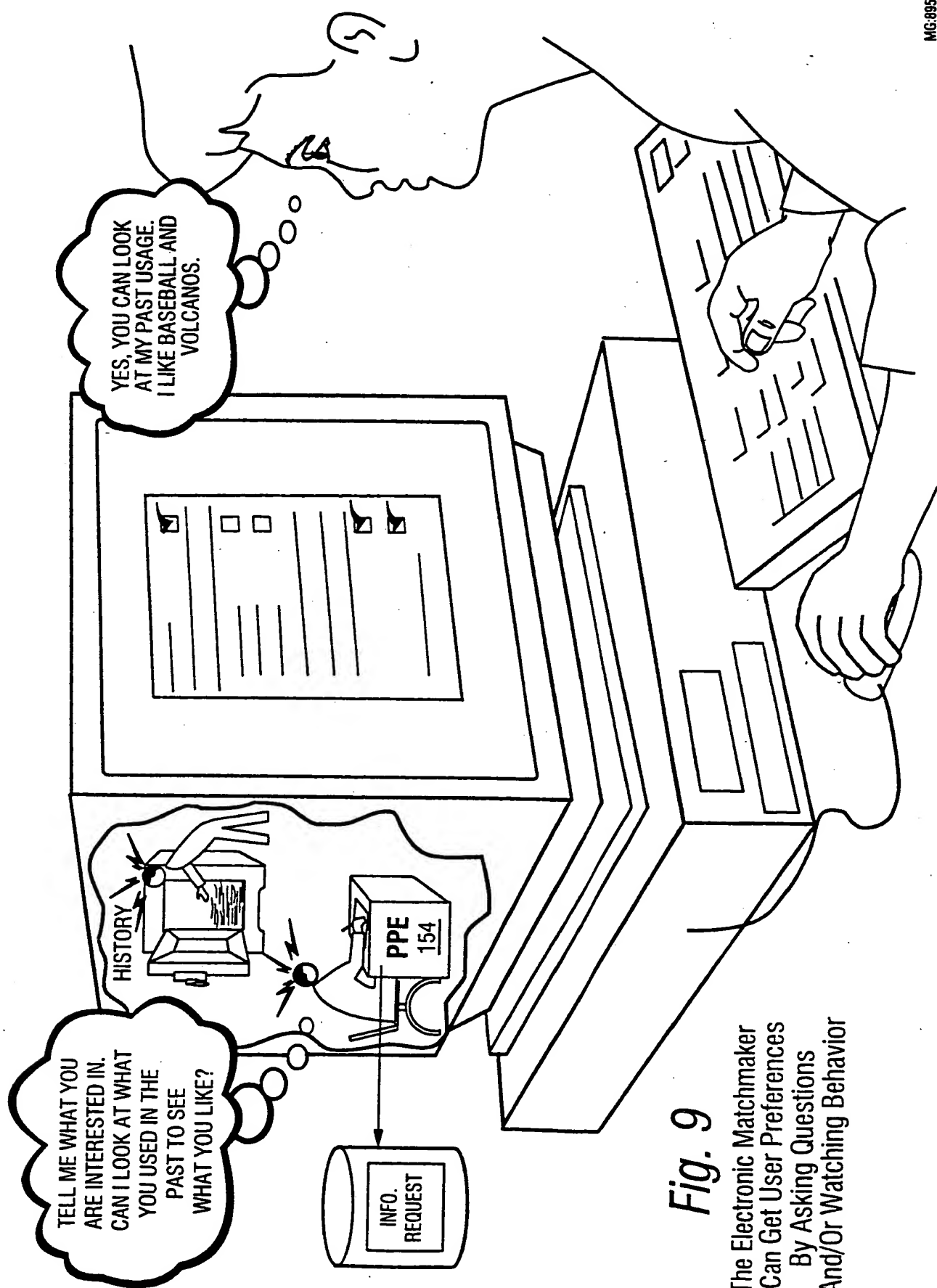


**Fig. 7** Electronic Matchmaker Can Match Different Kinds Of Content

APPROVED	O.G. FIG.	
BY	CLASS	SUBCLASS



**Fig. 8** Electronic Matchmaker Can Be Used For Matching Any Kinds of Things



**Fig. 9**  
 The Electronic Matchmaker  
 Can Get User Preferences  
 By Asking Questions  
 And/Or Watching Behavior

001020 69286h60

004020 6566660

APPROVED	O.G. FIG.	
BY	CLASS	SUBCLASS
DRAFTSMAN		

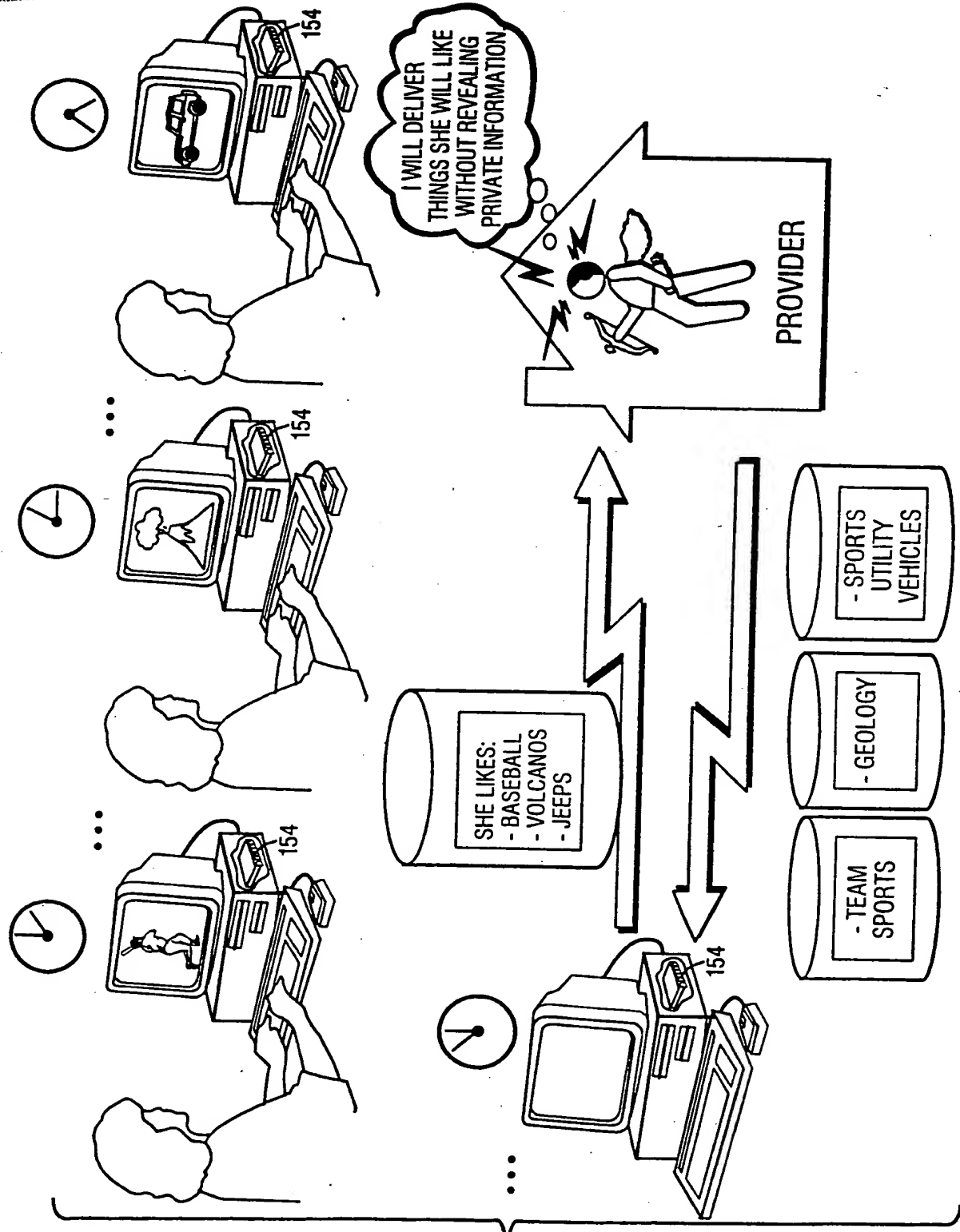
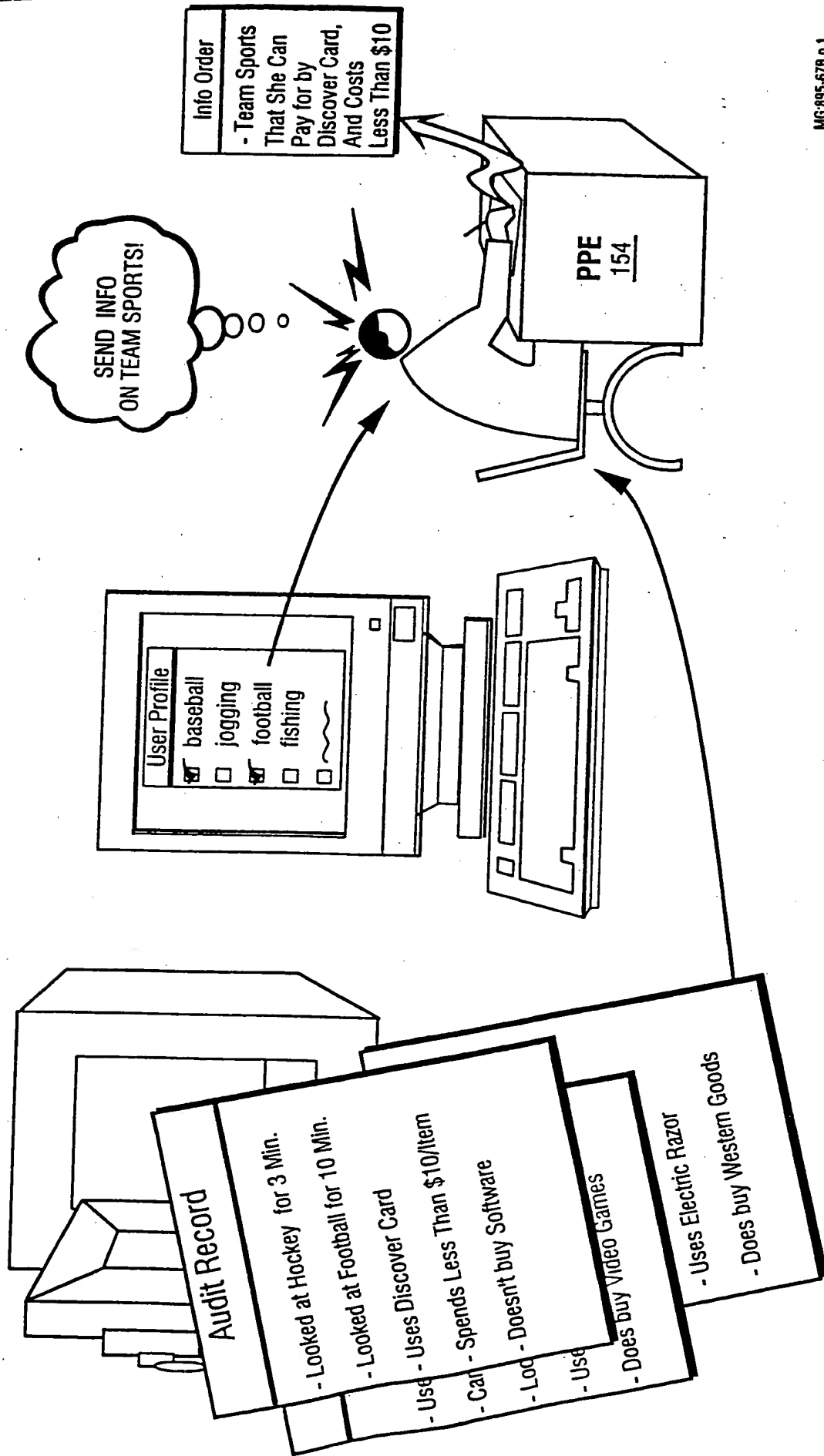


Fig. 10  
Example Electronic  
Matchmaking Process

Fig. 11

Example User Rights Management Information  
By Electronic Matchmaker



000020 6966660

APPROVED	O.G. FIG.	
BY	CLASS	SUBCLASS
DRAFTSMAN		

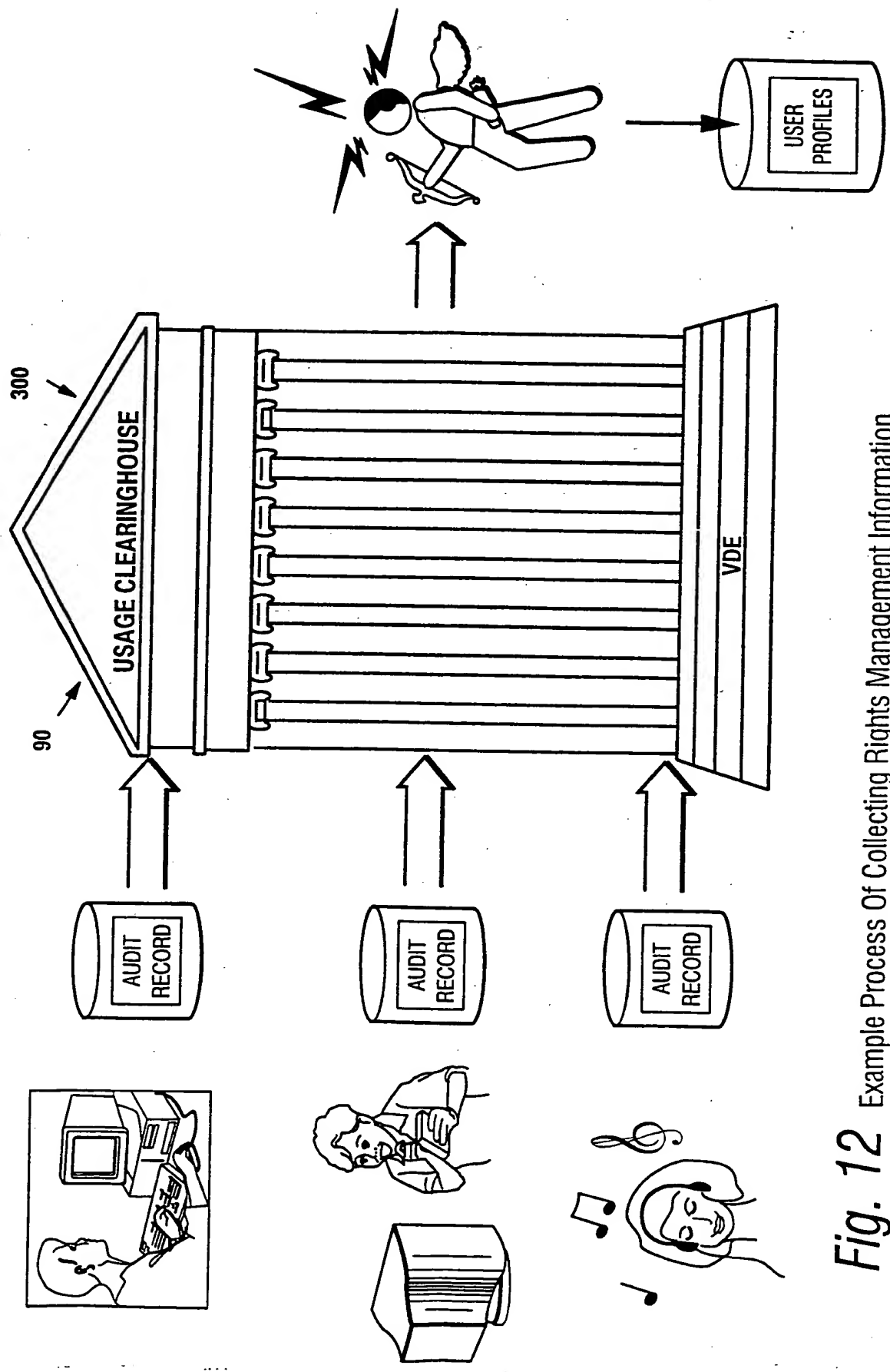


Fig. 12 Example Process Of Collecting Rights Management Information





004020\* 69566660

APPROVED	U.G. FIG.	
BY	CLASS	SUBCLASS
DRAFTSMAN		

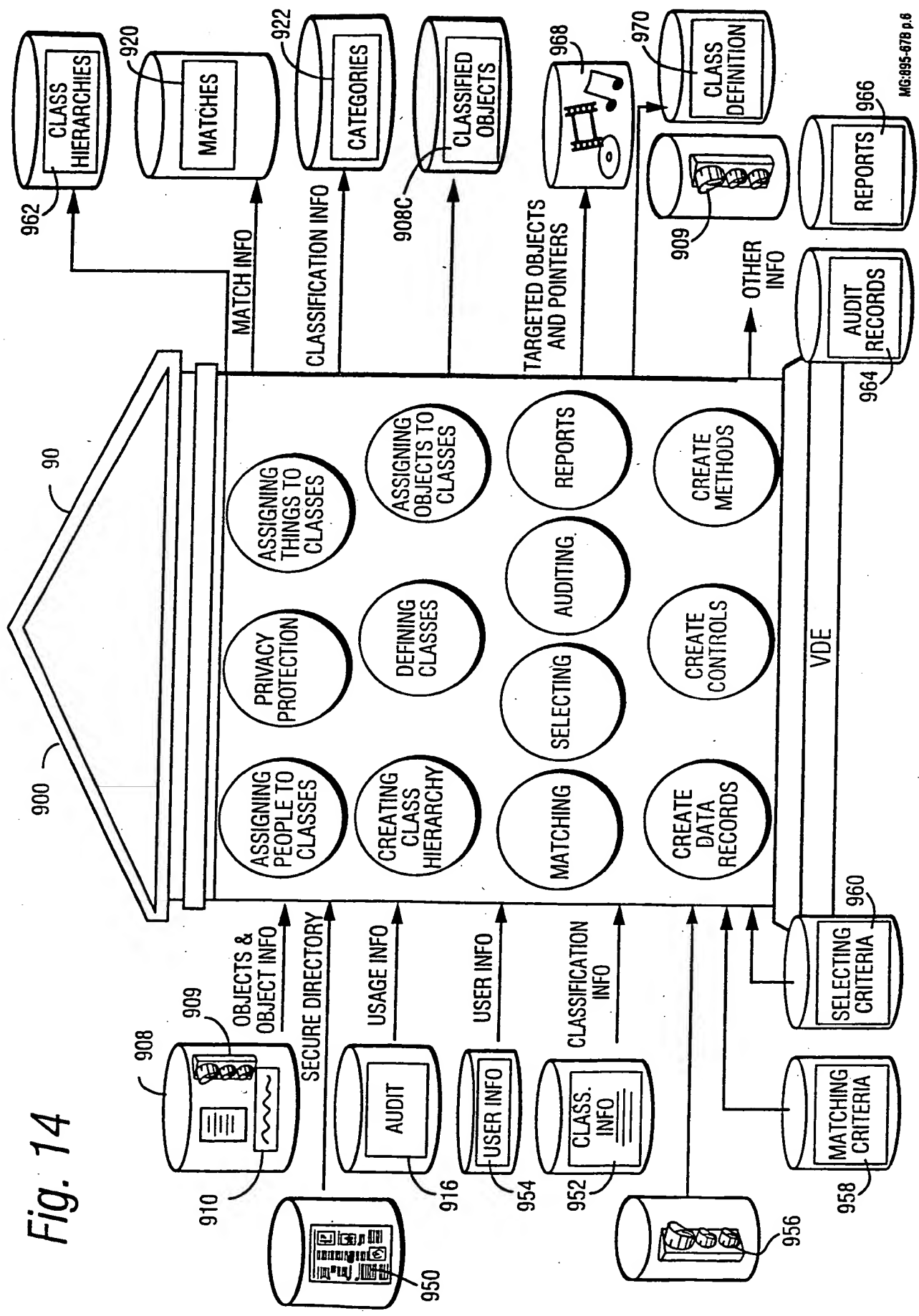


Fig. 14

APPROVED	O.G. FIG.	
BY	CLASS	SUBCLASS
DRAFTSMAN		

**Fig. 14(A)**  
Example Matching and Classification  
Commerce Utility System 900

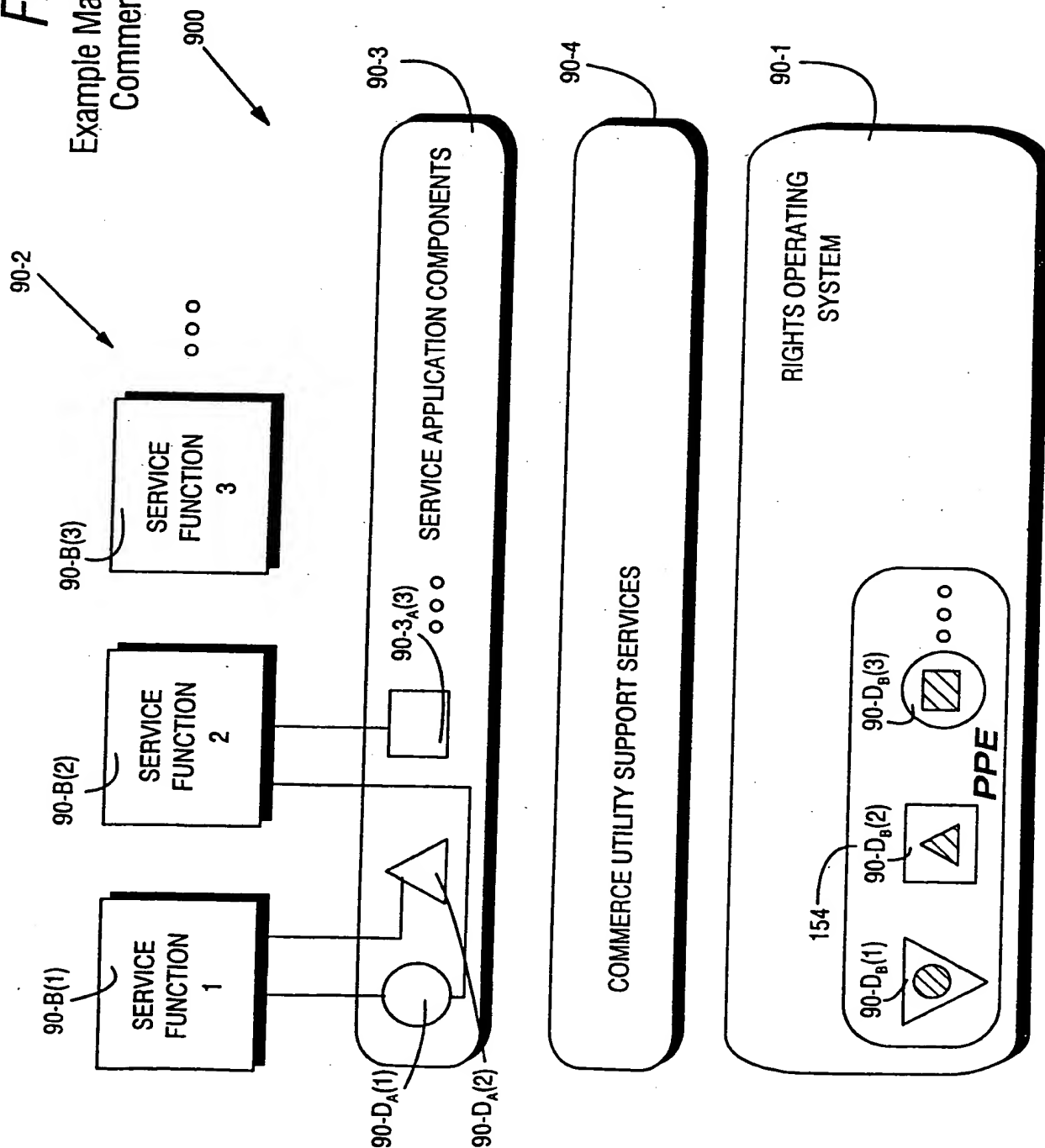


Fig 15

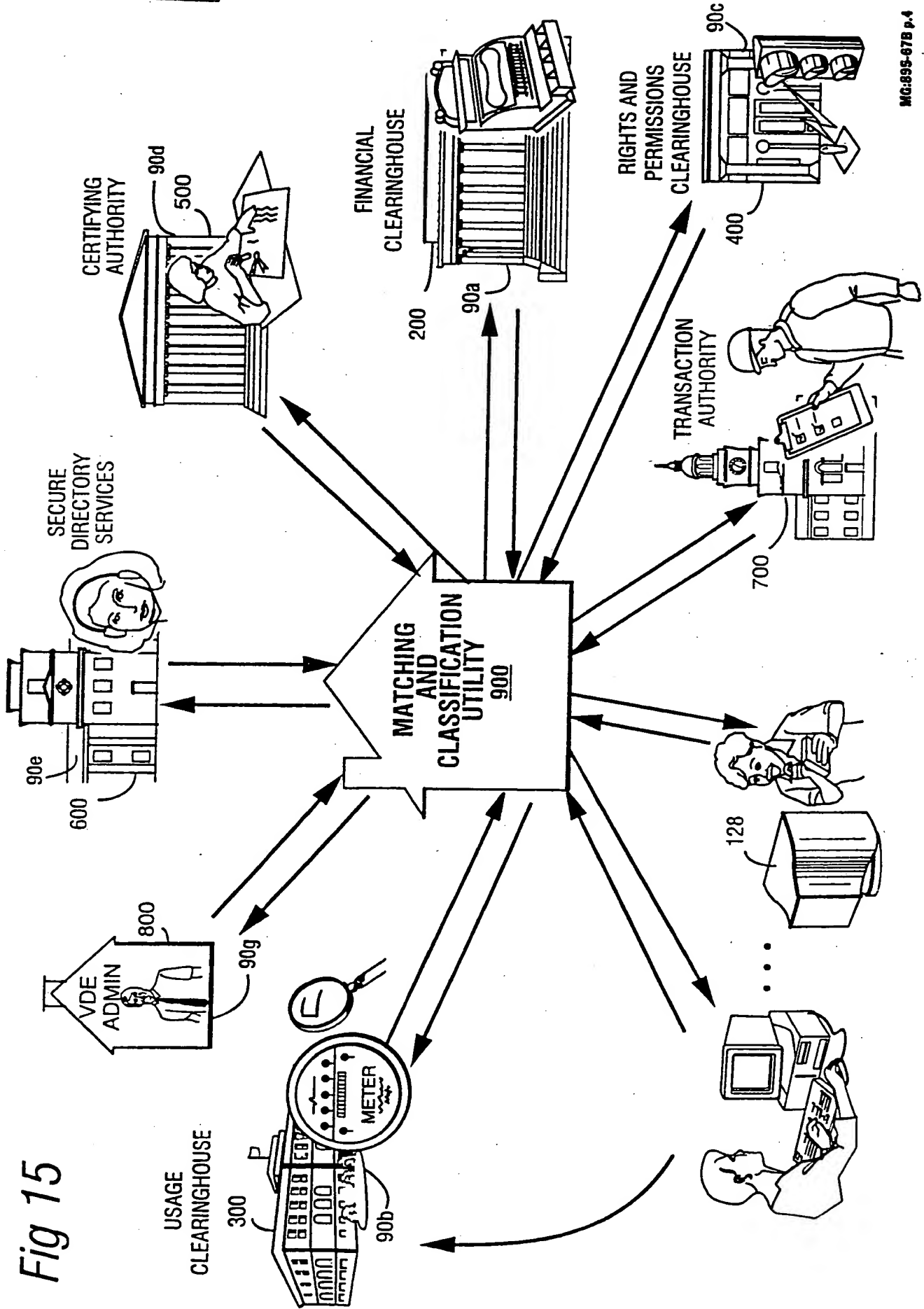
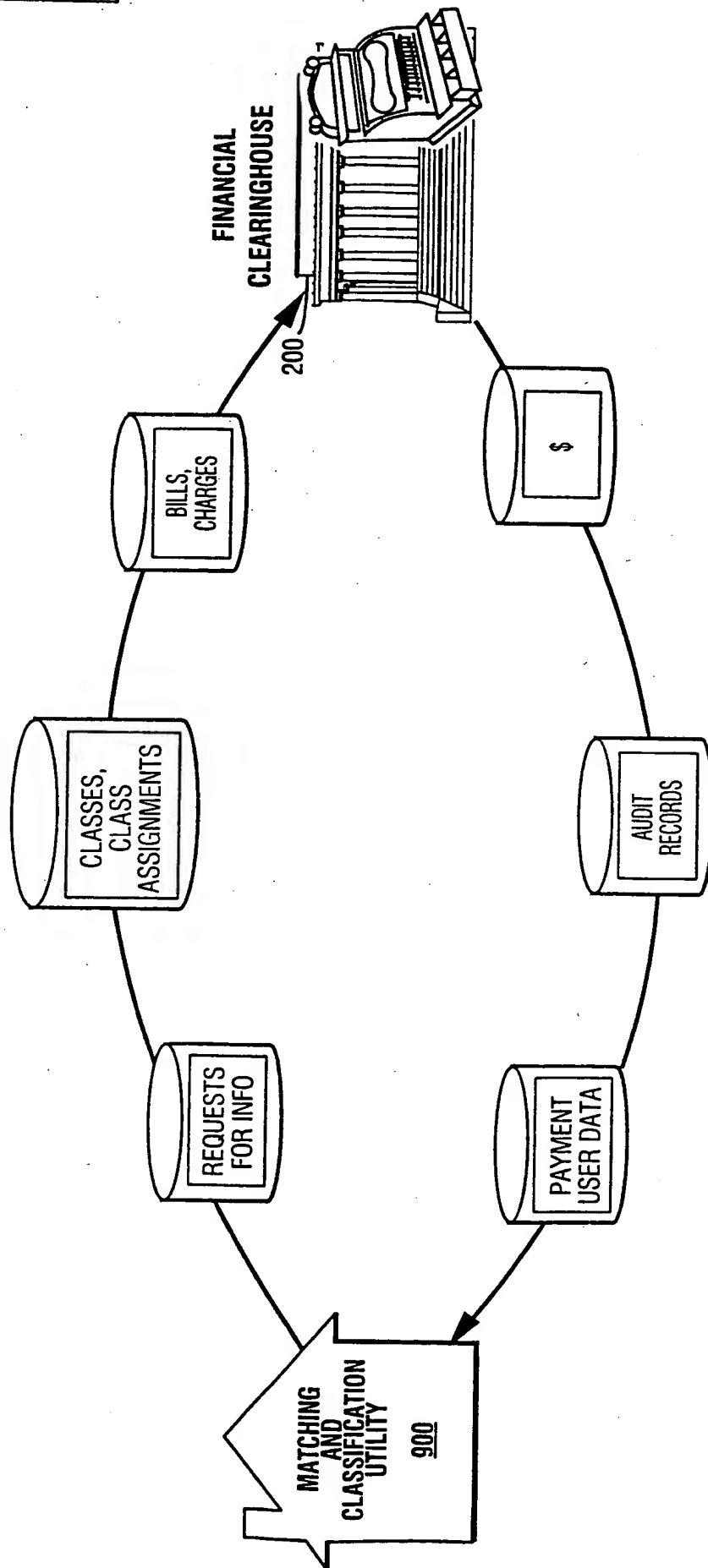


Fig. 15A



APPROVED	U.G. FIG.	
BY	CLASS	SUBCLASS
DRAFTSMAN		

APPROVED	U.G. FIG.	
BY	CLASS	SUBCLASS
DRAFTSMAN		

Fig. 15B

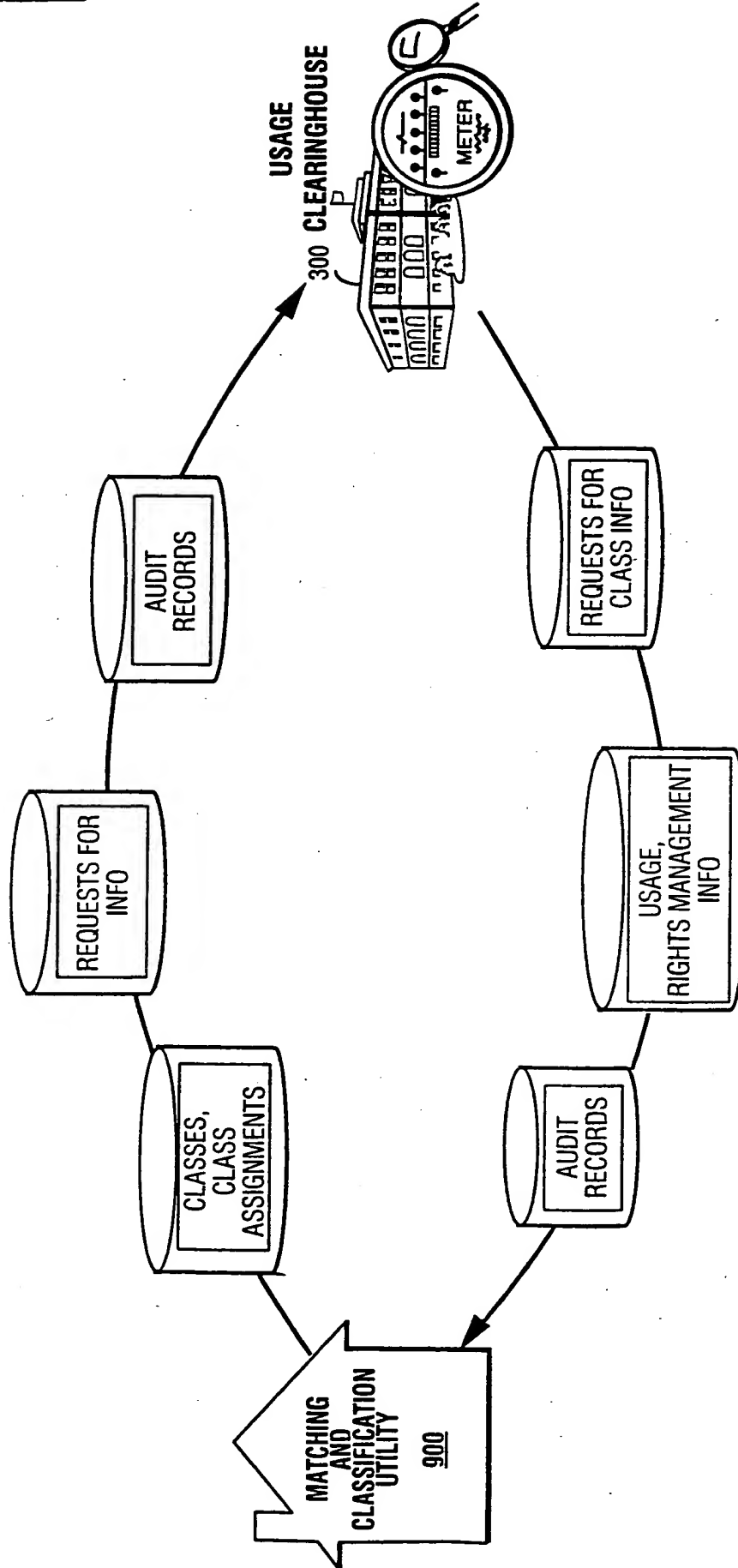
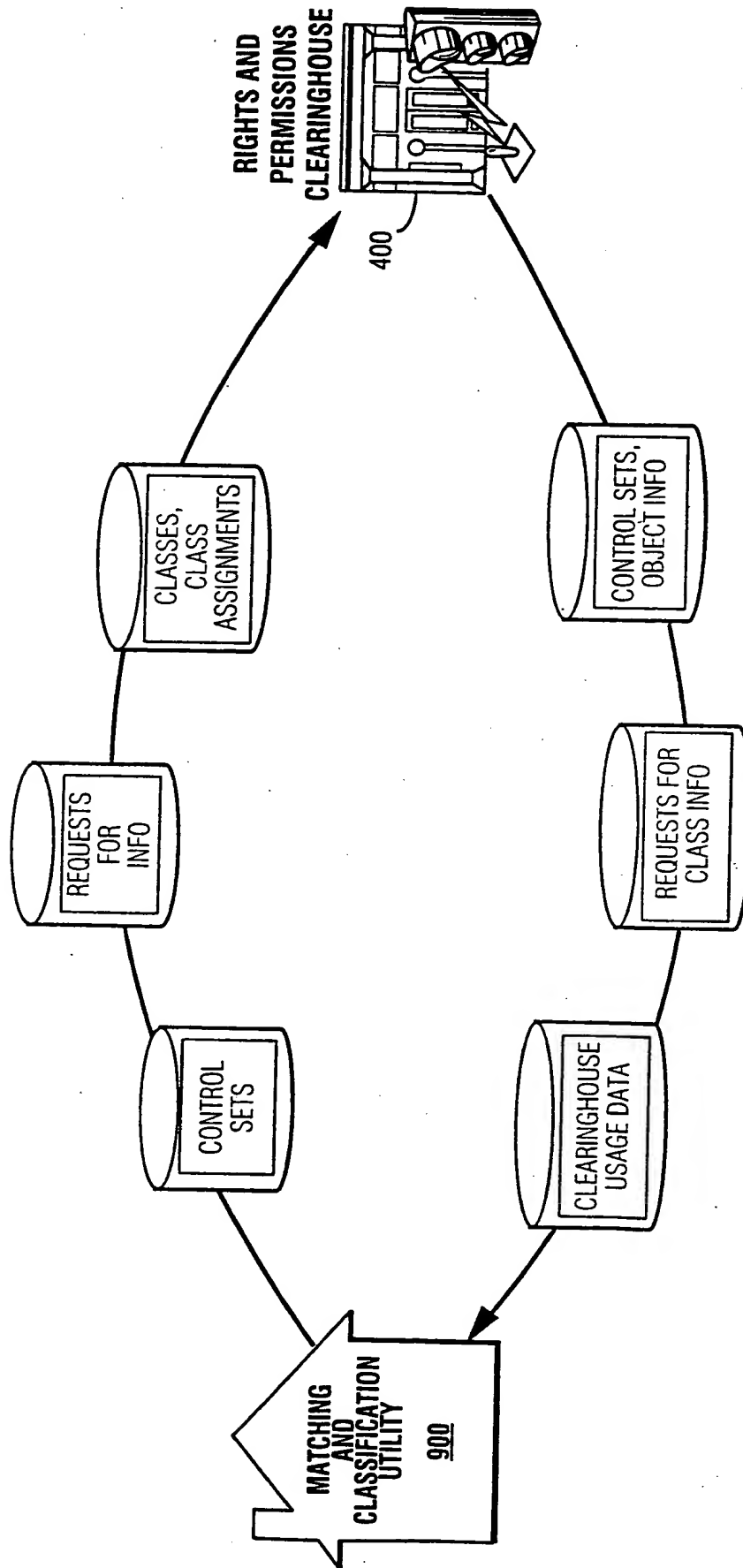


Fig. 15C



APPROVED	O.G. FIG.	
BY	CLASS	SUBCLASS
DRAFTSMAN		

000000 69000000

APPROVED	O.G. FIG.	
BY	CLASS	SUBCLASS
DRAFTSMAN		

Fig. 15D

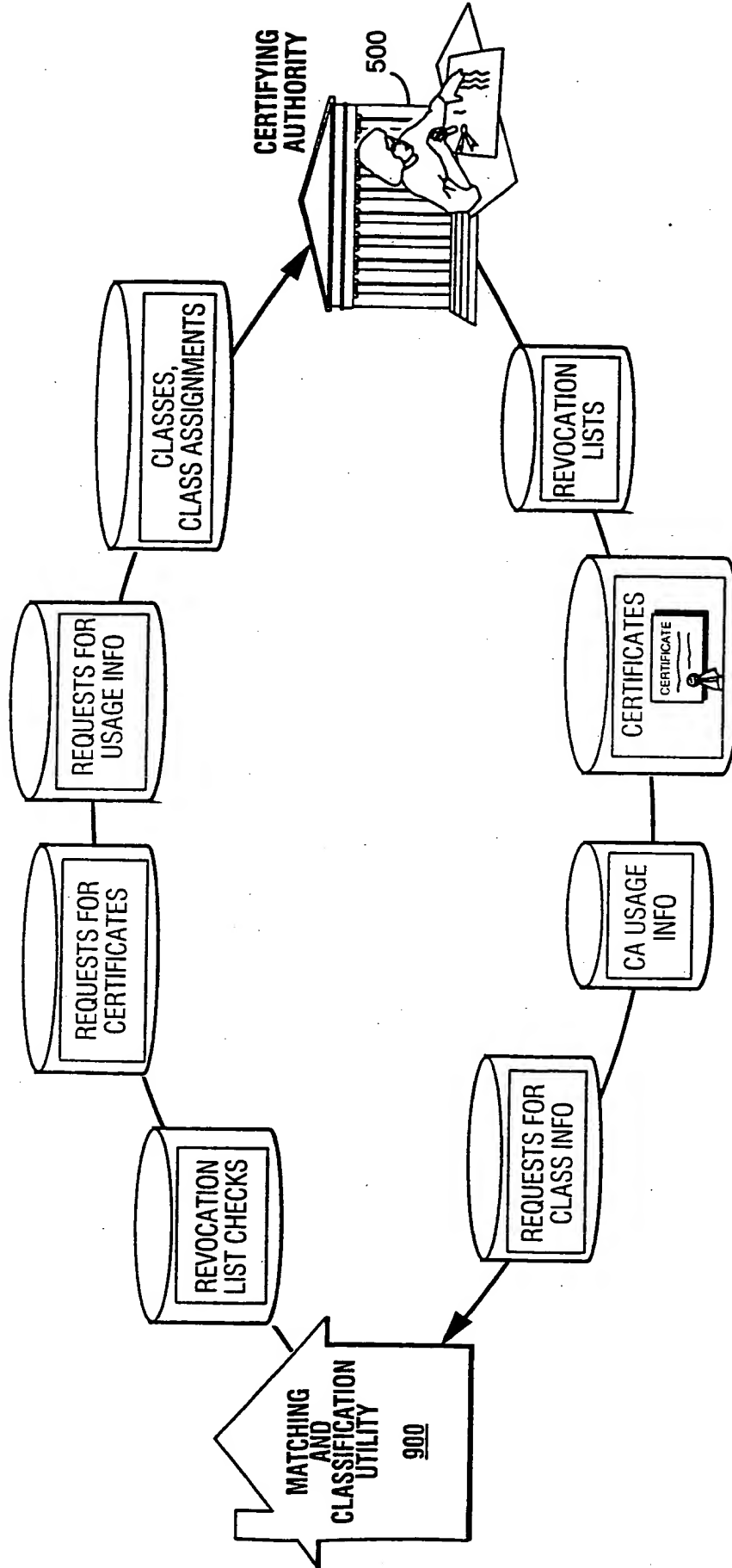
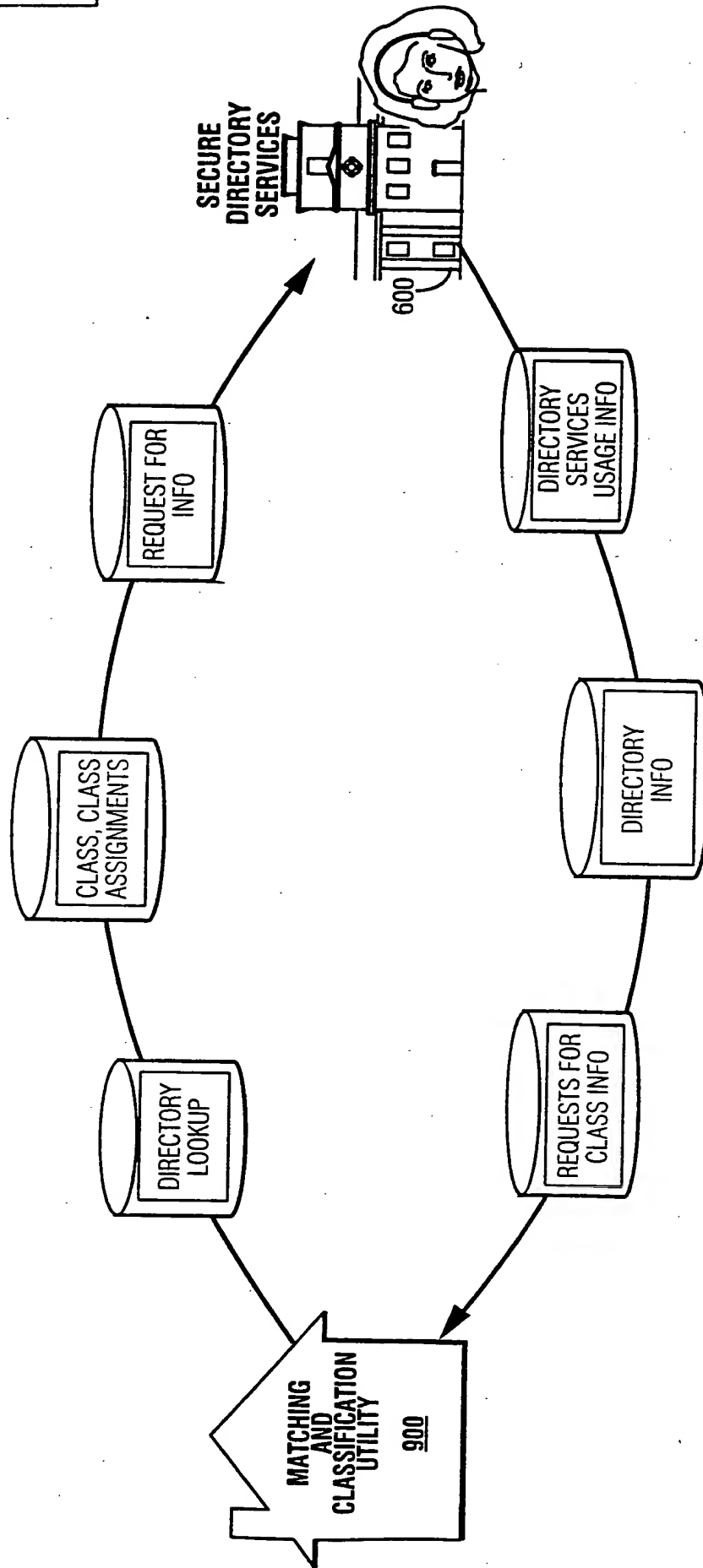


Fig. 15E





APPROVED	O.G. FIG.	
BY	CLASS	SUBCLASS
DRAFTSMAN		

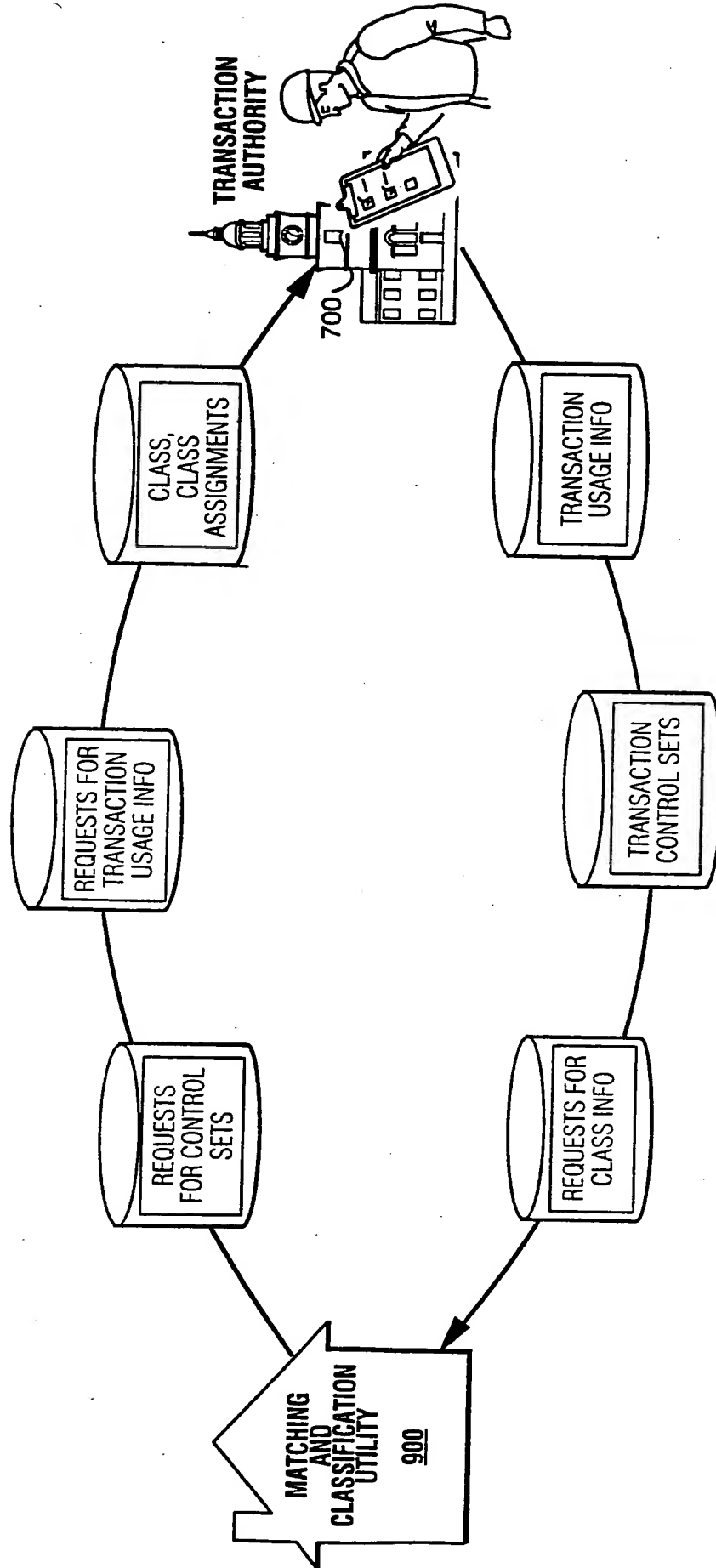
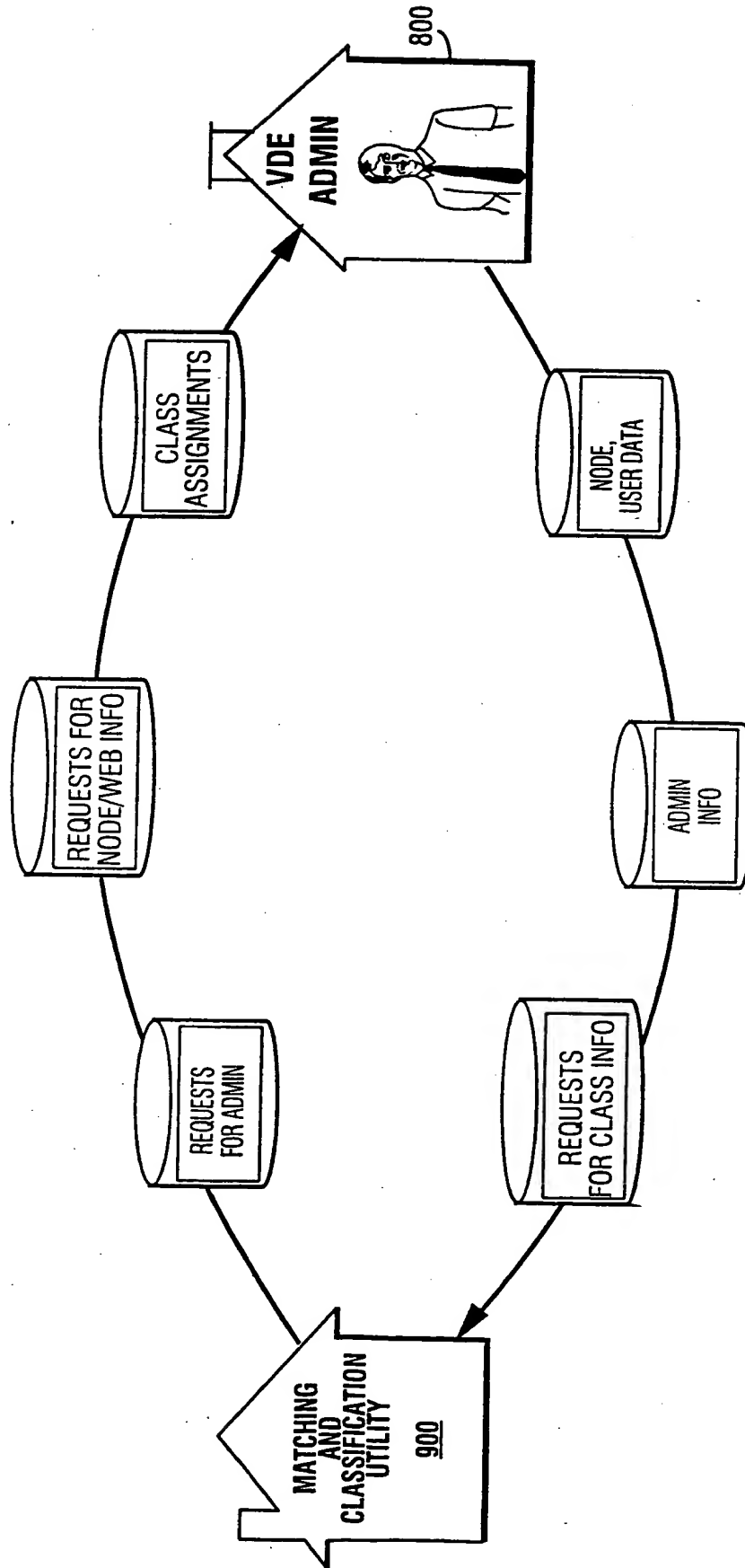


Fig. 15F

000020-6966660

APPROVED	O.G. FIG.	
BY	CLASS	SUBCLASS
DRAFTSMAN		

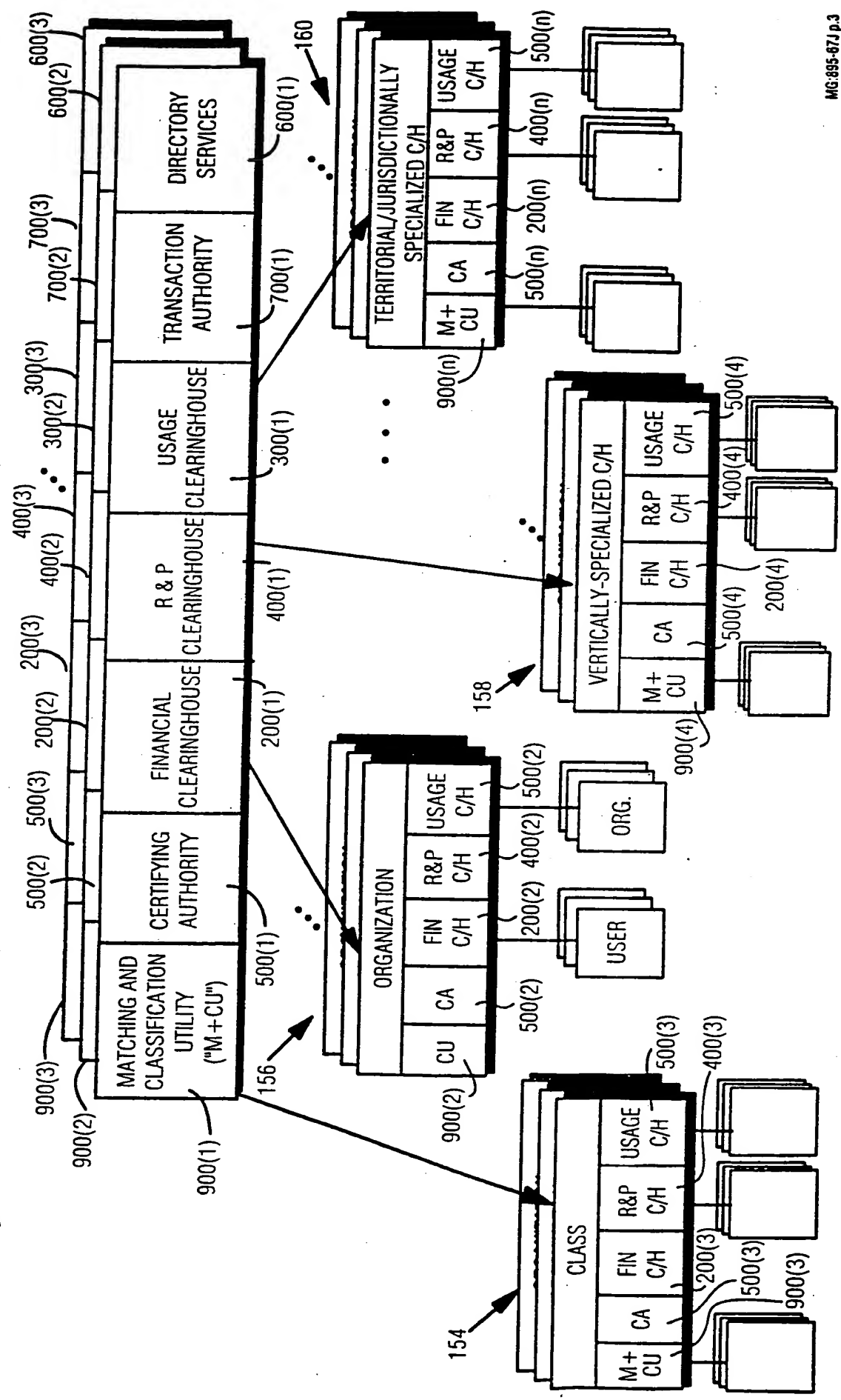
Fig. 15G



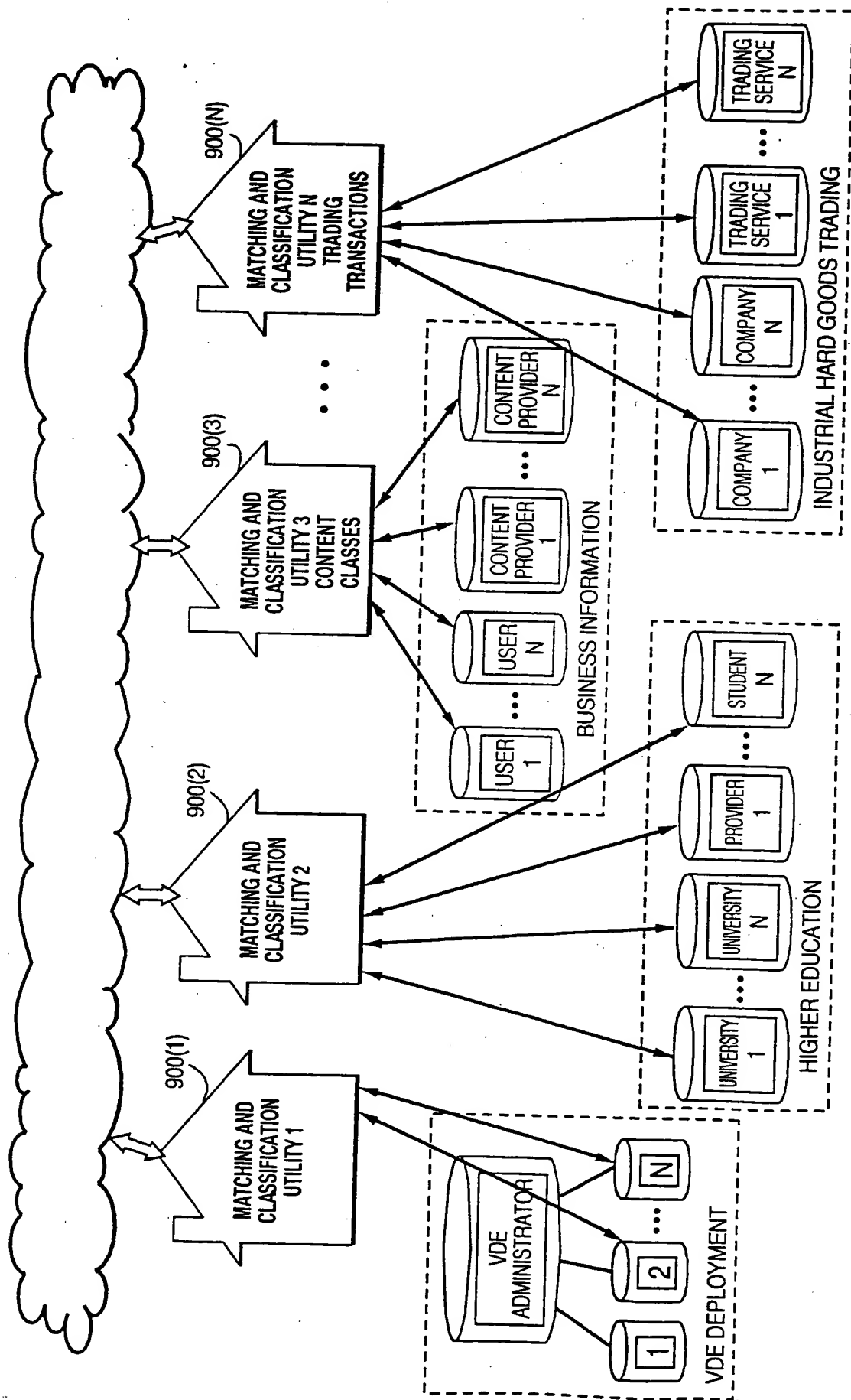
000000 000000 000000

APPROVED	O.G. FIG.	
BY	CLASS	SUBCLASS
DRAFTSMAN		

Fig. 16A  
Hierarchy of Commerce  
Utility Systems



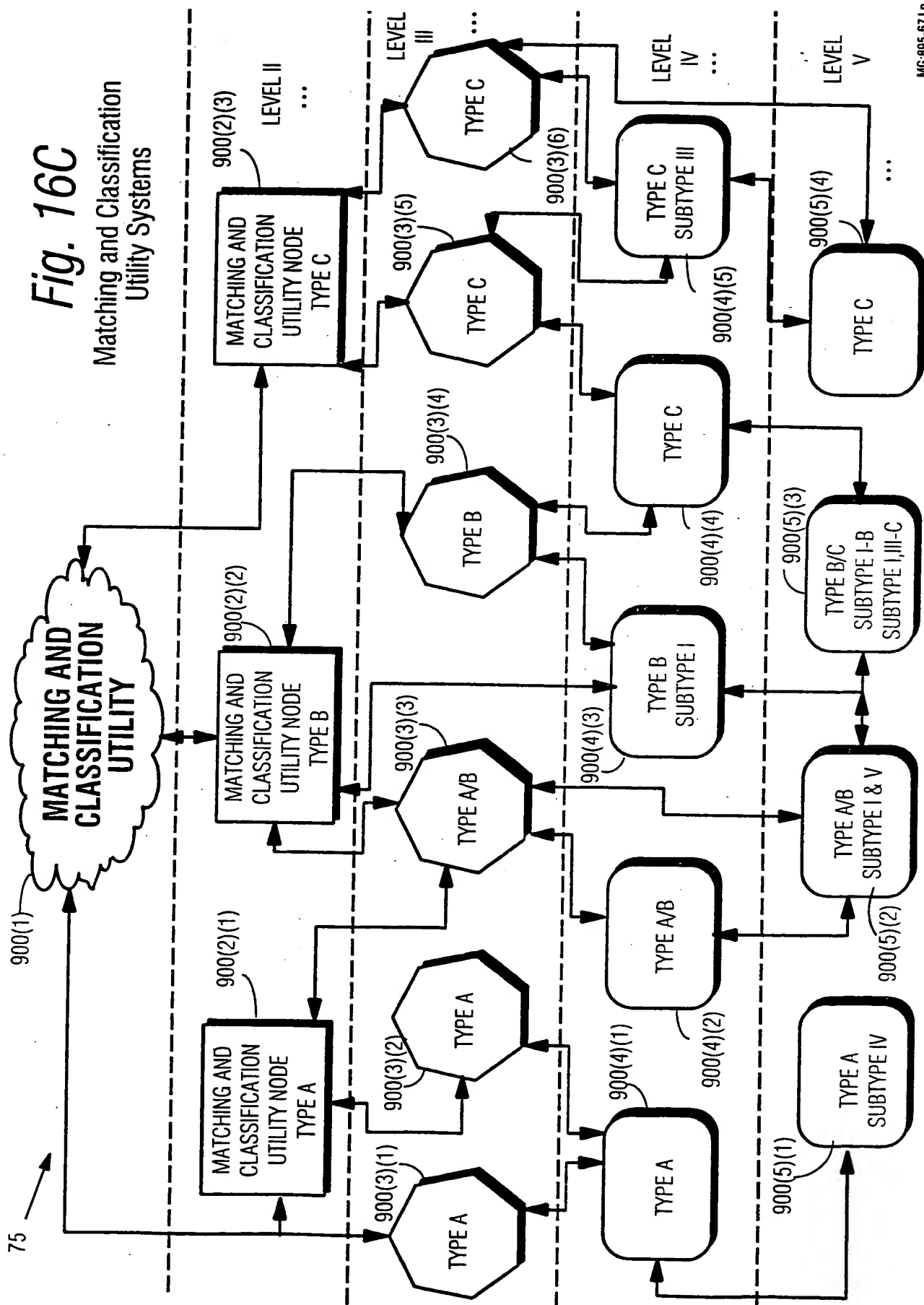
APPROVED	O.G. FIG.	
BY	CLASS	SUBCLASS
DRAFTSMAN		



**Fig. 16B** Matching & Classification Utilities Provide Services To Classes Of Nodes, Users, Content Services, Transaction Services.

**Fig. 16C**

Matching and Classification  
Utility Systems



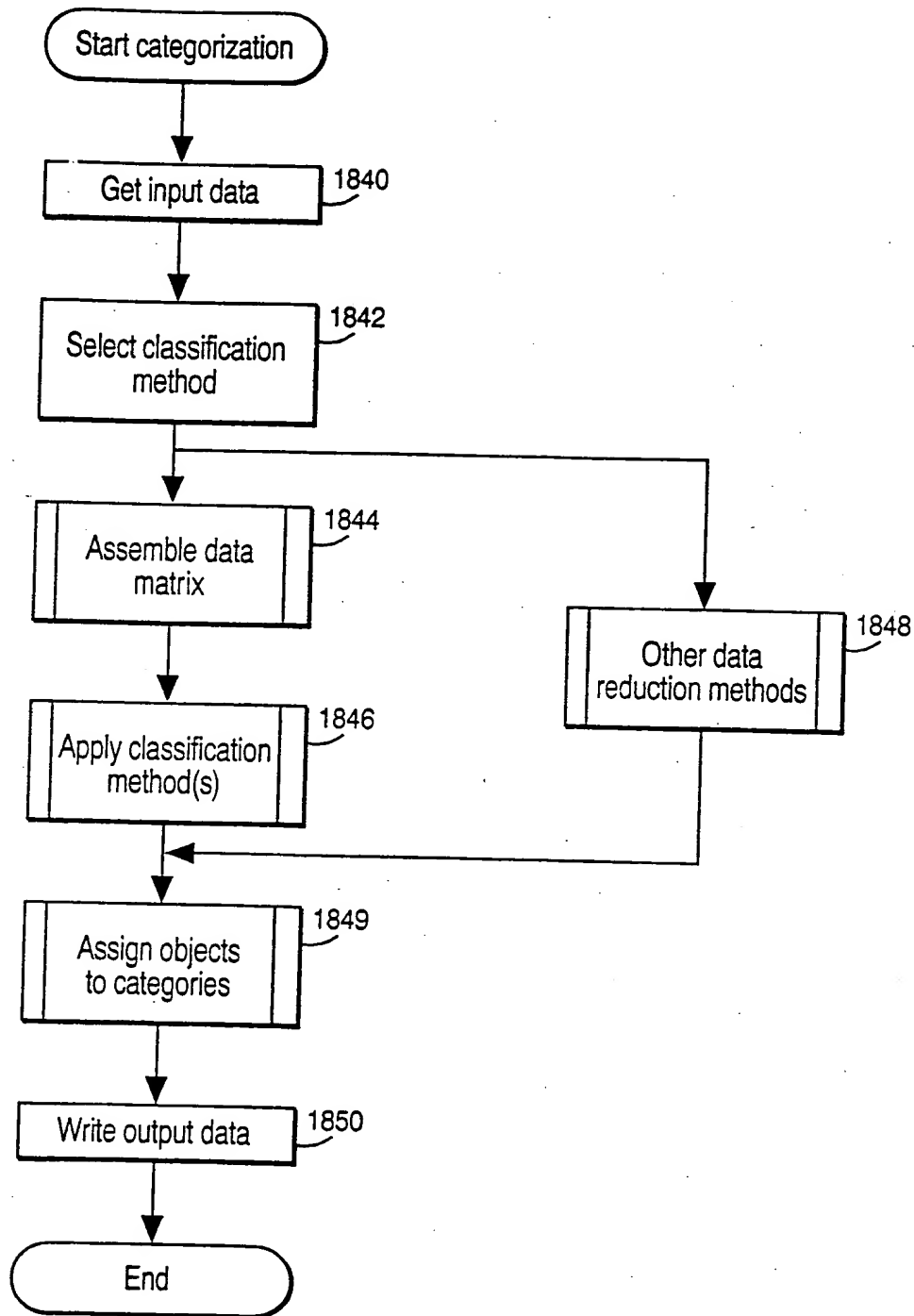
004020\* 69286660

Fig. 17

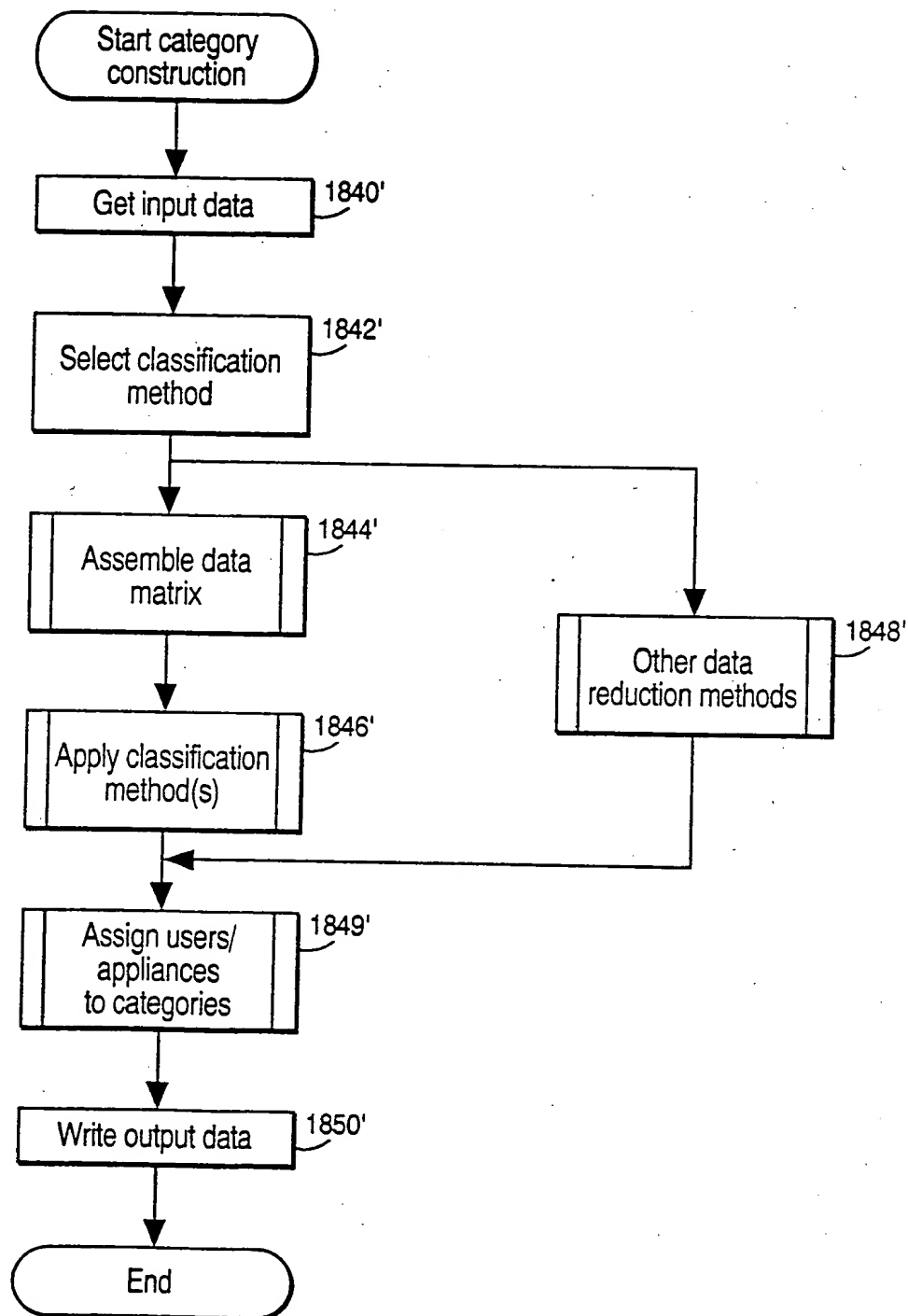
APPROVED	C.G. FIG.	
BY	CLASS	SUBCLASS
DRAFTSMAN		

FINANCIAL CLEARINGHOUSE	USAGE CLEARINGHOUSE	RIGHTS & PERMISSIONS CLEARINGHOUSE	CERTIFICATE AUTHORITY	SECURE DIRECTORY SERVICES	TANGIBLES & PURCHASE & FULFILLMENT	INTANGIBLES & PURCHASE & FULFILLMENT	CONTRACT NEGOTIATIONS & EXECUTION	EDI	SECURE DOCUMENT DELIVERY	BUSINESS PROCESS INTEGRATION	ARBITRATION & MEDIATION	ELECTRONIC ORDERS	ELECTRONIC BANKING & CURRENCY MANAGEMENT	CYBERSPACE TRADING ENVIRONMENTS	CLASSIFICATION UTILITY	...
AUDIT BY CLASS		MAINTAINING RECORDS		STATUS NOTIFICATION		EVENT DATABASE MANAGEMENT		CONTROL SET DATABASE MGMT		NOTARY		OBJECT REGISTRY		CERTIFICATE CREATION		...
OVERSEEING PROCESS		CONFIRMATIONS		ROUTING DATABASE		GENERATE CONTROL SETS		SEAL GENERATOR		OBJECT IDENTIFIER ASSIGNMENT		REVOCATION LIST MAINTENANCE		...		...
MONITORING STATUS		UNCOMPLETED EVENTS RECORD		GENERATING REQUESTS		PROCESS CONTROL LOGIC		DIGITAL TIME STAMP		COPYRIGHT REGISTRATION		...		...		...
COMPLETE PROCESS DEFINITION		REQUIREMENTS GENERATION		REPLICATION		EVENT FLOW GENERATION		FINGERPRINT /WATERMARK		CONTROL SET REGISTRY		...		...		...
PROCESS CONTROL		REPORT GENERATION		PROPAGATION		ROUTING		OFFERS & COUNTER OFFERS		TEMPLATE REGISTRY		DIRECTOR DATABASE MANAGEMENT		...		...
INTERFACE(S) TO SETTLEMENT SERVICES		FUNDS TRANSFER		EVENT CONSEQUENCES		USAGE DATABASE MANAGEMENT		ARCHIVE		DATABASE QUERY & RESPONSE PROCESSING		...		...		...
CURRENCY CONVERSION		TAX CALCULATION & APPLICATION		ACCOUNT RECONCILIATION		BILL CREATION & PROCESSING		RIGHTS & PERMISSION DATABASE MANAGEMENT		ADVERTISING DATABASE MANAGEMENT		...		...		...
ACCOUNT CREATION & IDENTIFIER ASSIGNMENT		PAYMENT AGGREGATION		IDENTITY AUTHENTICATION		MARKET RESEARCH		TEMPLATE DATABASE MANAGEMENT		AUTOMATIC CLASS GENERATION		AUTOMATIC MATCHING		...		...
PAYMENT DISAGGREGATION		BUDGET PRE-AUTHORIZATION		ELECTRONIC CURRENCY CREATION		NEGOTIATION		COMMERCE MGMT LANGUAGE PROCESSING		AUTOMATIC CLASS ASSIGNMENT		CLASS BASED SEARCHING		...		...
:		:		RIGHTS MANAGEMENT LANGUAGE PROCESSING		:		:		:		CLASS BASED DIRECTORY		...		...
:		:		:		:		:		:		:		:		...

90B



**Fig. 18**  
Example Steps to Categorize Objects



**Fig. 19**  
Example Steps to Categorize Users/Appliances



00000000000000000000

APPROVED	O.G. FIG.	
BY	CLASS	SUBCLASS
DRAFTSMAN		

Node ID	Operating system	Country	State	VDE Adm. Org.	VDE version	VDE maintenance level	User ID number	Gender	Age	Highest edu. level	Citizenship	Country of residence	City
128.1.4.132	WIN95	USA	CA	VDEADM	1.5	02	FF98C48A	Female	32	14	UK	UK	London

1852

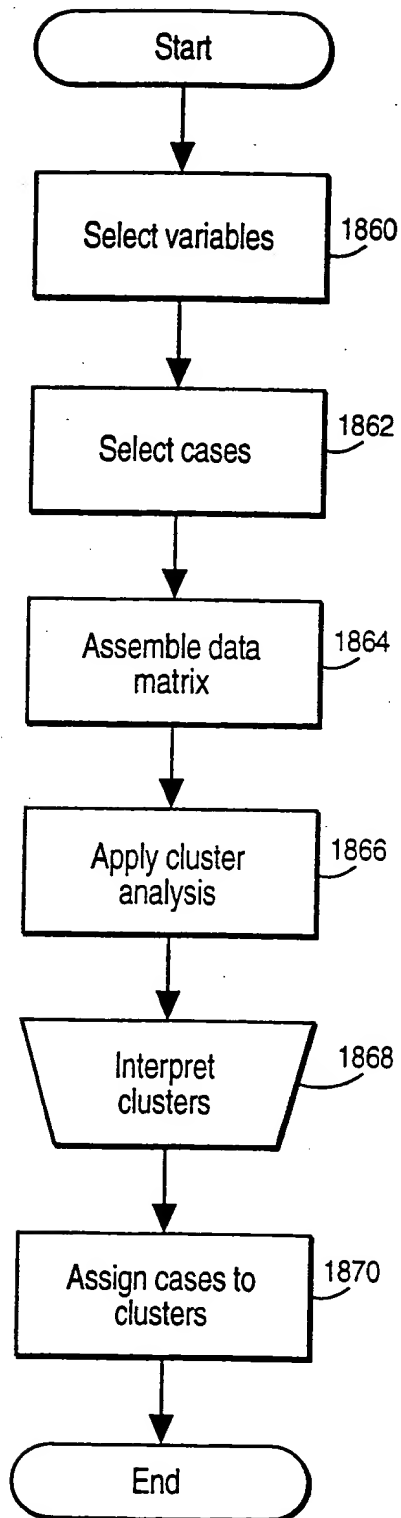
Myers-Briggs Categories				
User ID	Extroversion or introversion	Sensing or intuition	Thinking or feeling	Judging or perceiving
FF98C48A	I	N	T	J

SRI internet iVALS category

Fig. 20  
Example Composite Record-Input  
To Classification Process

User ID number	Object ID	Right ID	Method	Right ID	Method	Right ID	Method
CF129CD5	1227-33-1298-2	Use	Open	Meter	Budget	Simple purchase	\$1.00
					Bill		VISA

APPROVED	O.G. FIG.	
BY	CLASS	SUBCLASS
DRAFTSMAN		



**Fig. 21**  
Example Cluster Analysis Process

APPROVED	O.G. FIG.	
BY	CLASS	SUBCLASS
DRAFTSMAN		

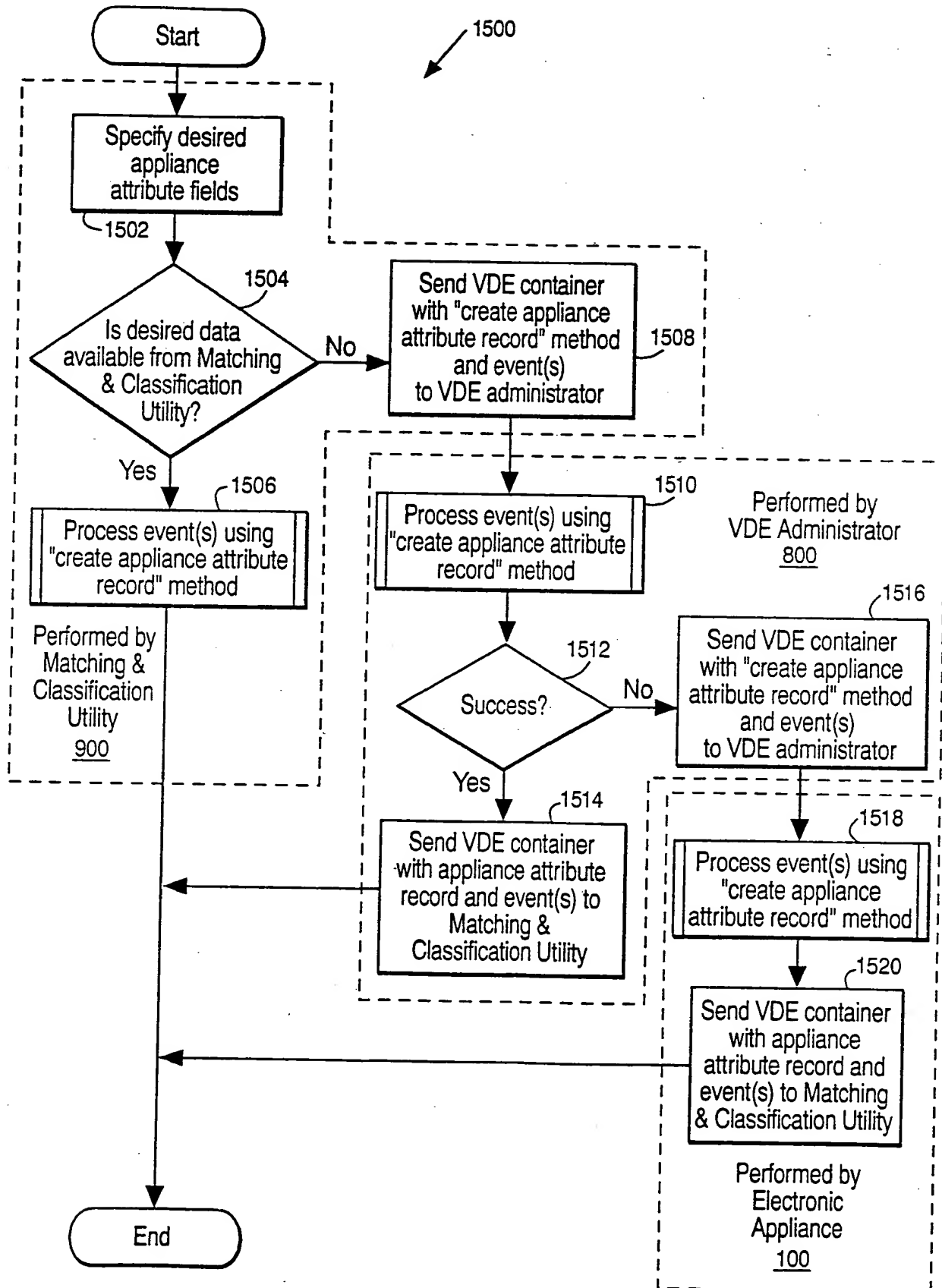
Variables	Typical Class 1-Profile	Typical Class 2-Profile
City	Washington, DC	Knoxville, TN
Av. price of content purchased last 30 days	\$8.79	\$1.95
Number of trips abroad in last 2 years	3	0
Type of content most frequently purchased	National and international news	Sports
2nd most frequently purchased	Business information	Religious
Third most frequently purchased	Travel information	Movies
Pay per view	No	Yes
Add new controls to content	Yes	No
Stated religious affiliation	None	Methodist
SRI internet lifestyle category	Surfer	Worker
Modification rights purchased	20% of text items	5% of text items

**Fig. 22** Example Classification Output Illustrating Different Classes Based Upon Differing Profiles

APPROVED	O.G. FIG.	
BY	CLASS	SUBCLASS
DRAFTSMAN		

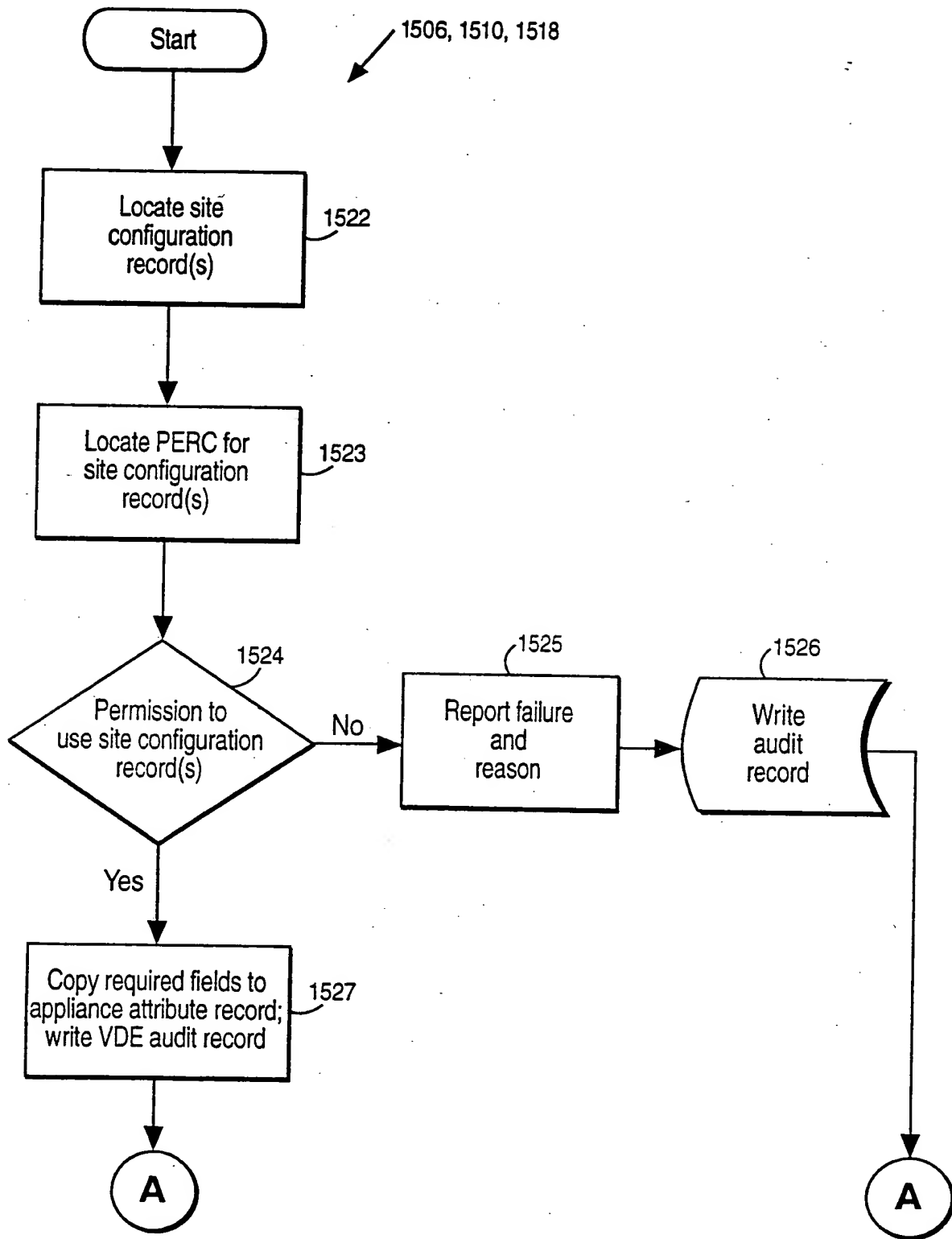
Variables	Factor 1 Loadings	Factor 2 Loadings
Region of US	.82	.11
Family income	.90	-.09
Av. price of content purchased last 30 days	.72	.15
Number of trips abroad in last 2 years	.91	.09
Percent news, business	.79	-.12
Percent entertainment	-.69	.21
Add new controls to content	.88	.19
Religiosity	-.60	-.22
Participates in sports	-.21	.87
Watches team/individual sports on TV	-.11	.62
Owns a sports utility vehicle	.12	.72
Consumes beer/wine	-.18	.83
Male/female	.21	.92
Education beyond college	.45	-.45
Buys pay per view sports events	-.25	.77
Number of TVs in house	-.11	.66

**Fig. 23** Example Classification Output Illustrating Principal Components Analysis On Parameter Data And Categories Data



**Fig. 24**

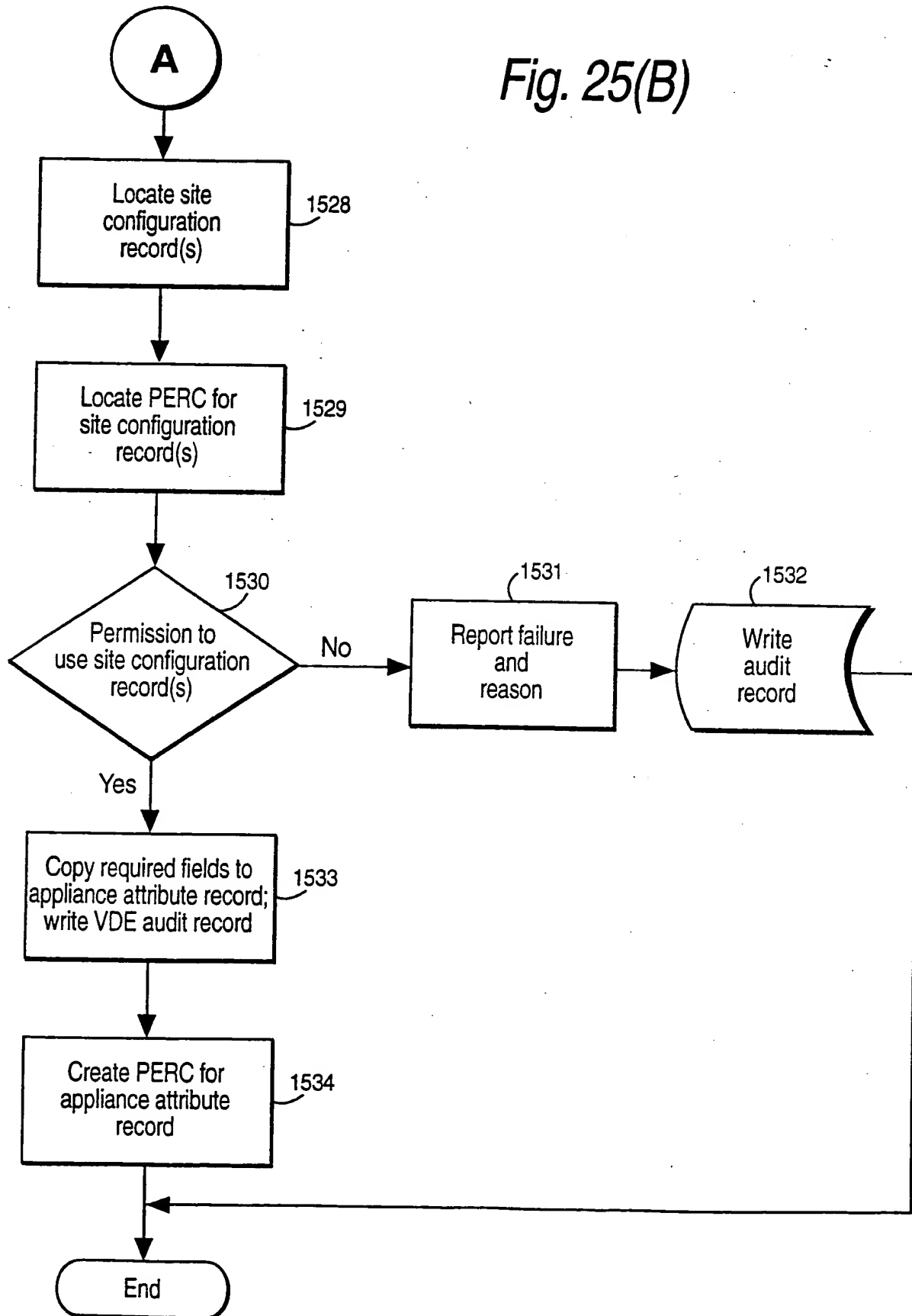
Example Steps for Collecting Appliance Attribute Data



**Fig. 25(A)**

Example Create Appliance Attribute Data Method steps

Fig. 25(B)



**Fig. 26(A)** Example Appliance Attribute Record

Appliance ID	Attr1	Attr2	Attr3	Attr4	Attr5	Attr6	Attr7	Attr8	Attr9	....	Attr N
1536(1)											
1538(N)											

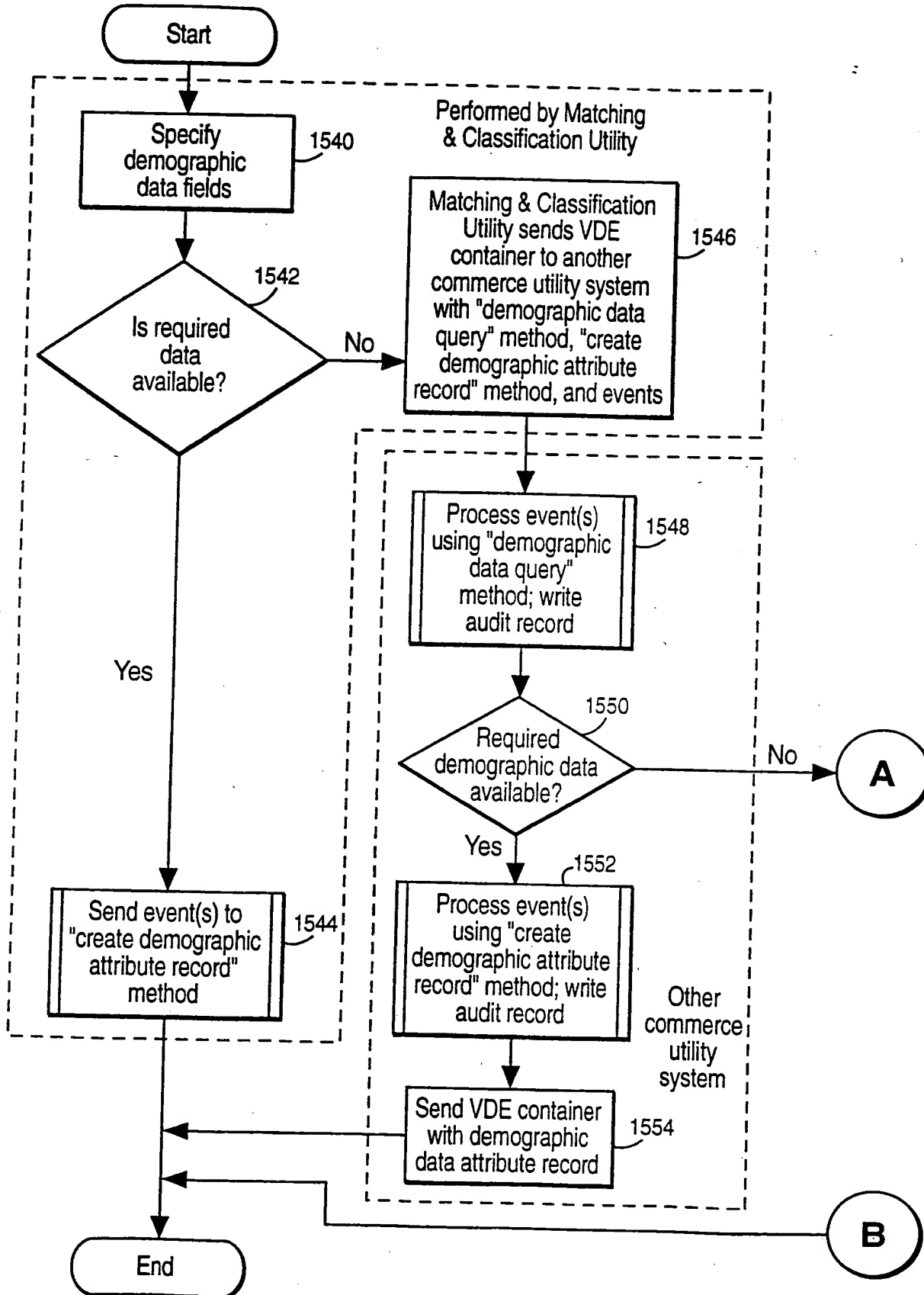
**Fig. 26(B)**

Appliance ID	Operating system	Country	State	VDE Adm. Org.	VDE version	VDE maintenance level
128.1.4.132	WIN95	USA	CA	VDEADM	1.5	02
1536(1)		1538(B)		1538(D)	1538(E)	1538(F)
1538(A)		1538(C)				

Appliance ID	Operating system	Country	State	VDE Adm. Org.	VDE version	VDE maintenance level
128.1.4.132	1	1	8	23	1.5	2
1536(1)		1538(B)		1538(D)	1538(E)	1538(F)
1538(A)		1538(C)				

**Fig. 26(C)**  
Example Appliance Attribute Record





**Fig. 27(A)** Example Steps for Collecting Demographic Data

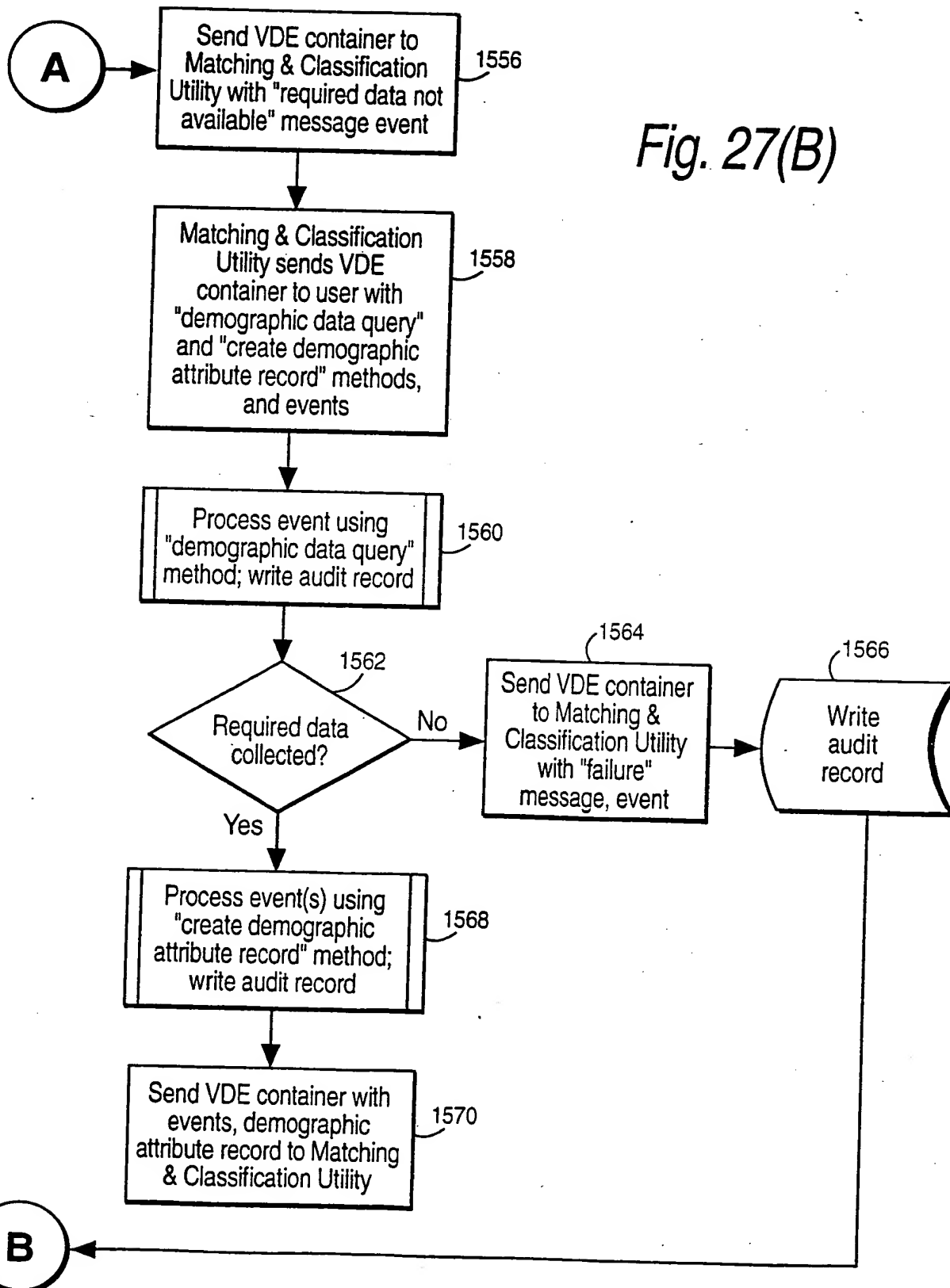


Fig. 27(B)

APPROVED	O.G. FIG.	
BY	CLASS	SUBCLASS
DRAFTSMAN		

### Demographic Information Questionnaire

Name: \_\_\_\_\_

Address: \_\_\_\_\_

Address: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_ - \_\_\_\_\_

Gender (M/F) \_\_\_\_\_ Date of birth: \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_

Education:

- ☐ Have not graduated high school
- ☐ High school graduate
- ☐ Some college
- ☐ College degree
- ☐ Some graduate school
- ☐ Advanced degree

All Information Will Be Treated As Confidential

**Fig. 28** Example Demographic Questionnaire "Pop-Up" Screen

Fig. 29(A) Example User Demographic Attribute Information Record

User ID	Attr1	Attr2	Attr3	Attr4	Attr5	Attr6	Attr7	Attr8	Attr9	....	Attr N
1574											

1572

1576(N)

Fig. 29(B) Example Demographic Attribute Record

User ID number	Gender	Age	Highest edu. level	Citizenship	Country of residence	District	City	Street address
FF98C48A	Female	32	14	UK	UK	London	Westminster	32 Shepherd Market

1572-1

1574

1576(A)

1576(B)

1576(C)

1576(D)

1576(E)

1576(F)

1576(G)

1576(H)

....

Fig. 29(C) Example Demographic Attribute Record

User ID number	Gender	Age	Highest edu. level	Citizenship	Country of residence	District	City	Street address
FF98C48A	1	32	14	44	1	1	22	32 3243

1572-2

1574

1576(A)

1576(B)

1576(C)

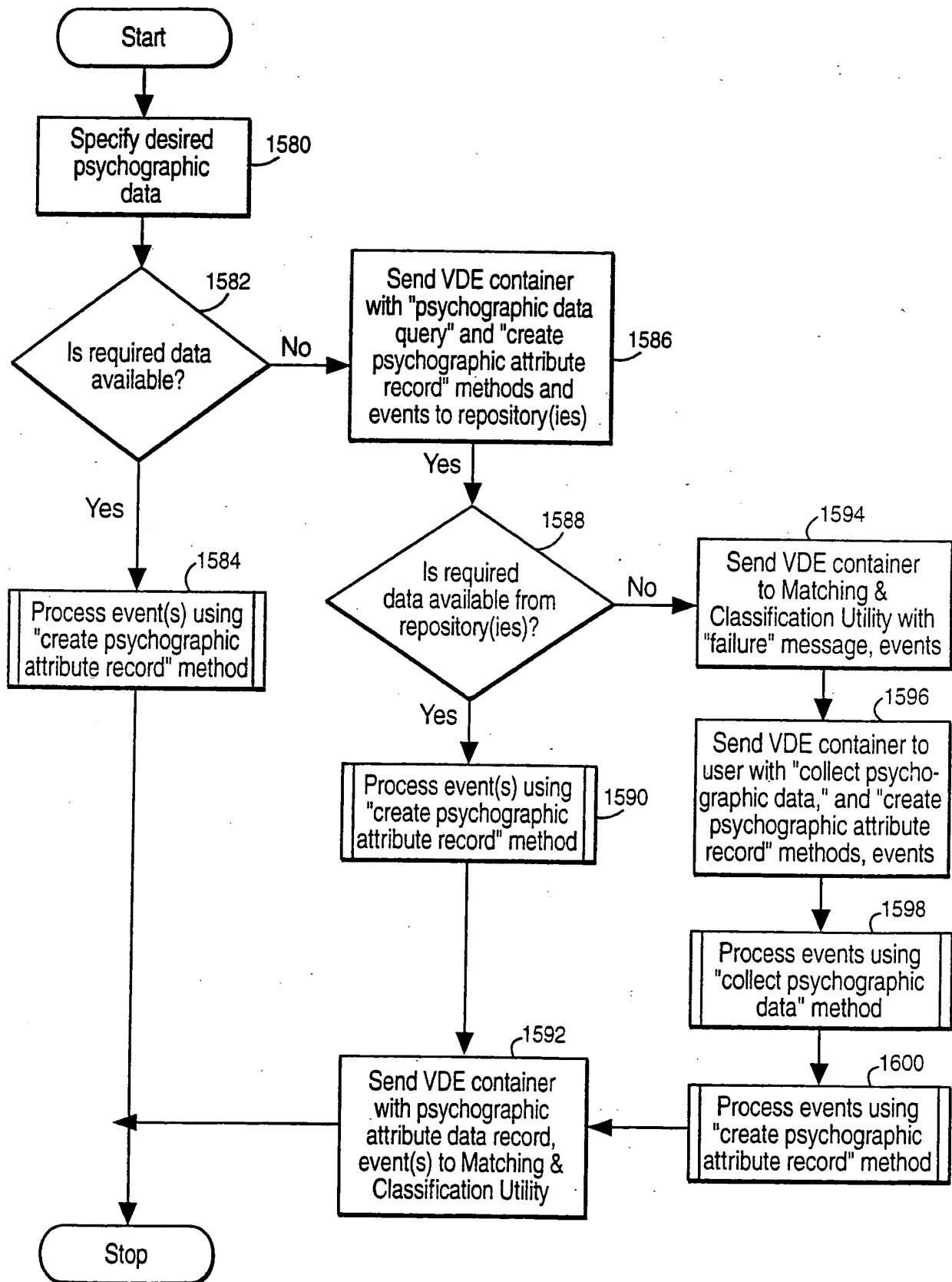
1576(D)

1576(E)

1576(F)

1576(G)

1576(H)



**Fig. 30** Example Steps for Collecting Psychographic Data

APPROVED	O.G. FIG.	
BY	CLASS	SUBCLASS
DRAFTSMAN		

**Today's Anonymous Questionnaire**  
**Thanks for taking the time to answer these questions**  
**We'll put \$2.00 in your VDE budget**

1. Do you feel sad, blue, unhappy or "down in the dumps"?
  - ☐ A. Never
  - ☐ B. Rarely
  - ☐ C. Sometimes
  - ☐ D. Very Often
  - ☐ E. Most of the time
  
2. Do you feel tired, having little energy, unable to concentrate?
  - ☐ A. Never
  - ☐ B. Rarely
  - ☐ C. Sometimes
  - ☐ D. Very Often
  - ☐ E. Most of the time
  
3. Do you feel uneasy, restless or irritable?
  - ☐ A. Never
  - ☐ B. Rarely
  - ☐ C. Sometimes
  - ☐ D. Very Often
  - ☐ E. Most of the time
  
4. Do you have trouble sleeping or eating (too little or too much)?
  - ☐ A. Never
  - ☐ B. Rarely
  - ☐ C. Sometimes
  - ☐ D. Very Often
  - ☐ E. Most of the time

☐ Click here for more questions

All Information Will Be Treated As Confidential

**Fig. 31** Example Psychographic Questionnaire "Pop-Up" Screen

000000-09000000

APPROVED	O.G. FIG.	
BY	CLASS	SUBCLASS
DRAFTSMAN		

Fig. 32(A) Example User Psychographic Attribute Information Record

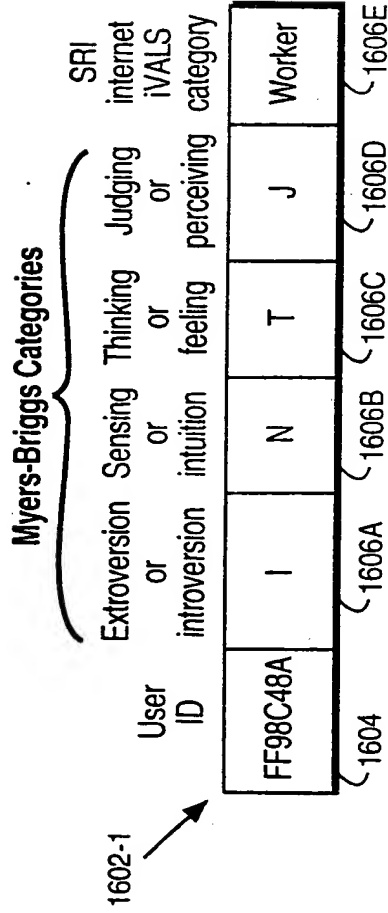
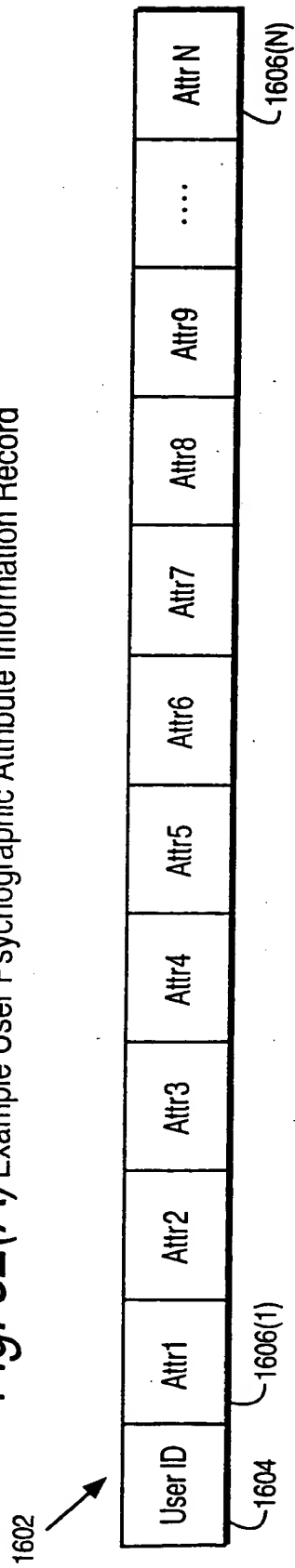


Fig. 32(B)  
Example User Psychographic Attribute Record

APPROVED	O.G. FIG.	
BY	CLASS	SUBCLASS
DRAFTSMAN		

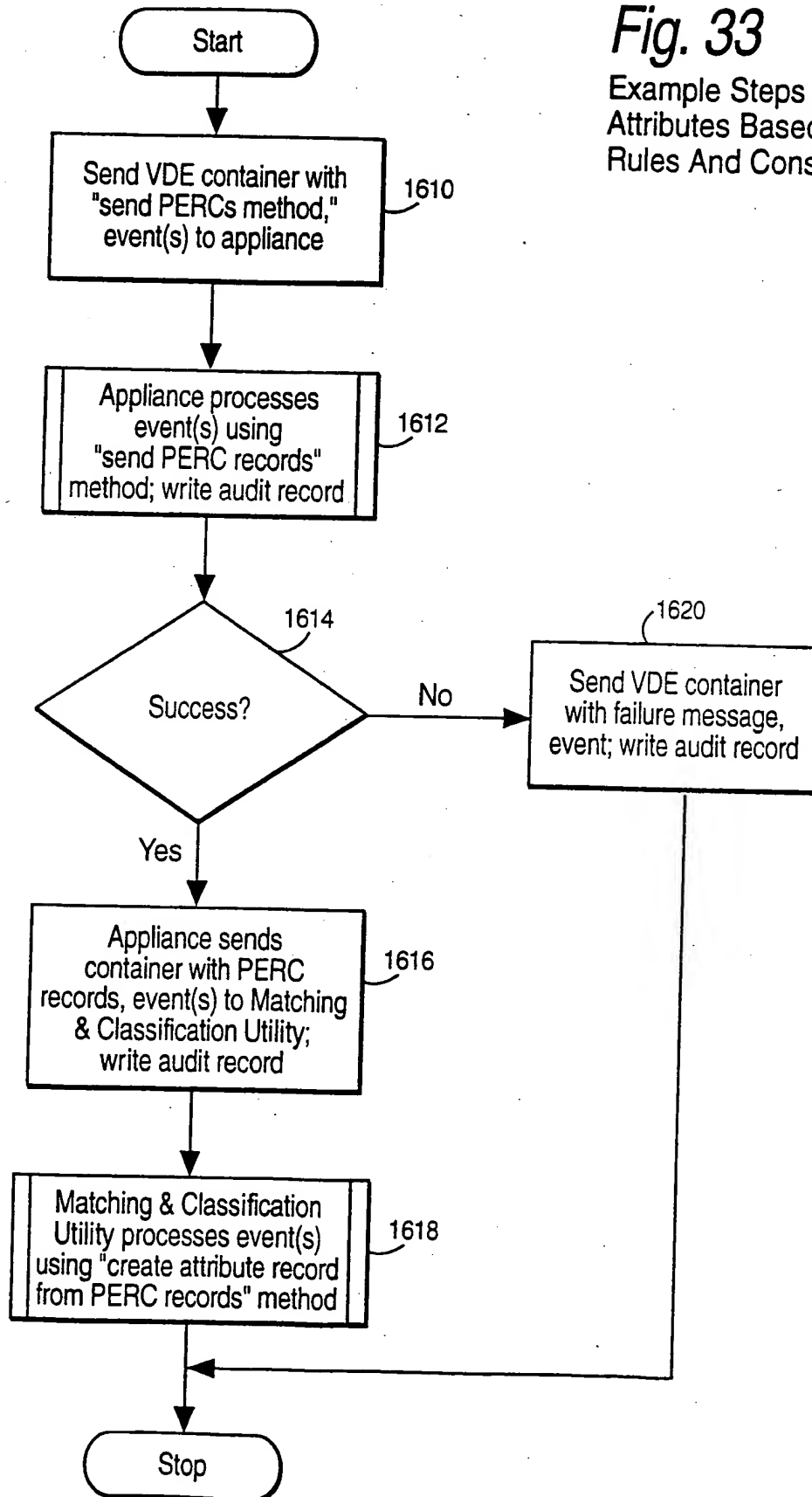
Fig. 32(C) Example Psychographic Attribute Record

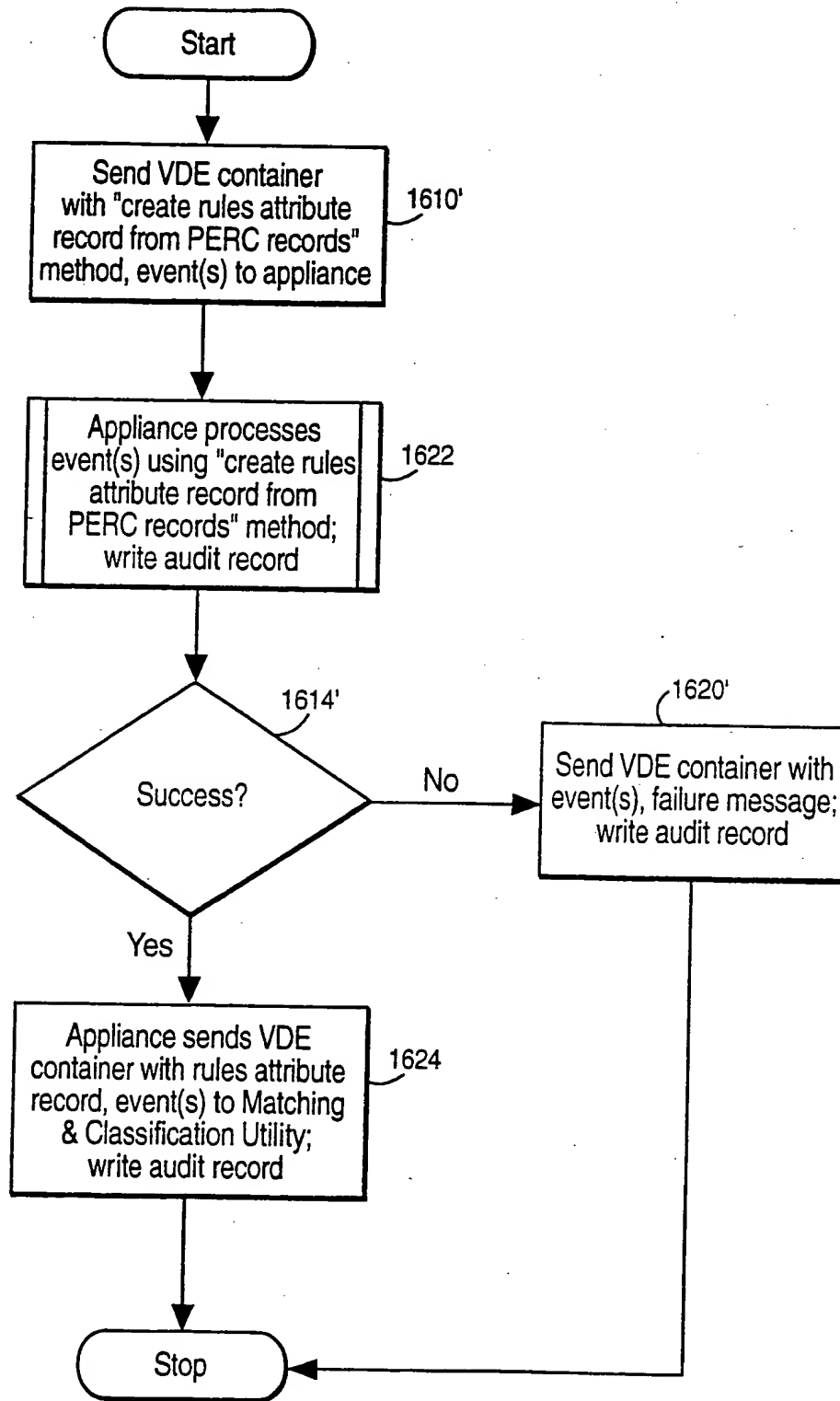
1602-2		Myers-Briggs Categories				SRI Internet iVALS Categories							
User ID		Extroversion or introversion	Sensing or intuition	Thinking or feeling	Judging or perceiving	Wizard	Pioneer	Worker	Seeker	Surfer	Immigrant	Sociable	Main-streamer
FF98C48A		1	0	1	1	0	0	1	0	0	0	0	0
1604		1606A	1606B	1606C	1606D	1606E							



**Fig. 33**

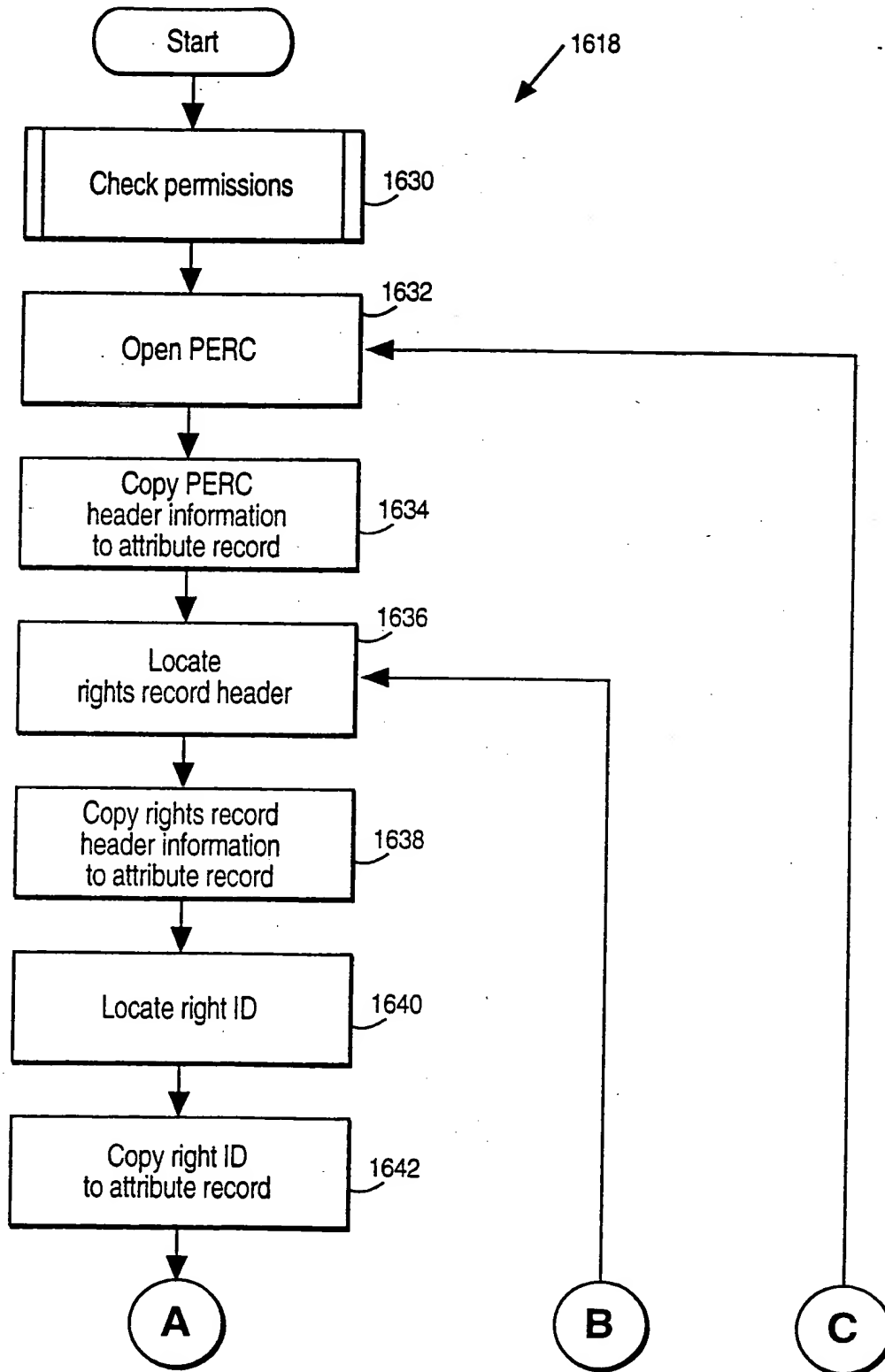
Example Steps For Determining  
Attributes Based On Available  
Rules And Consequences





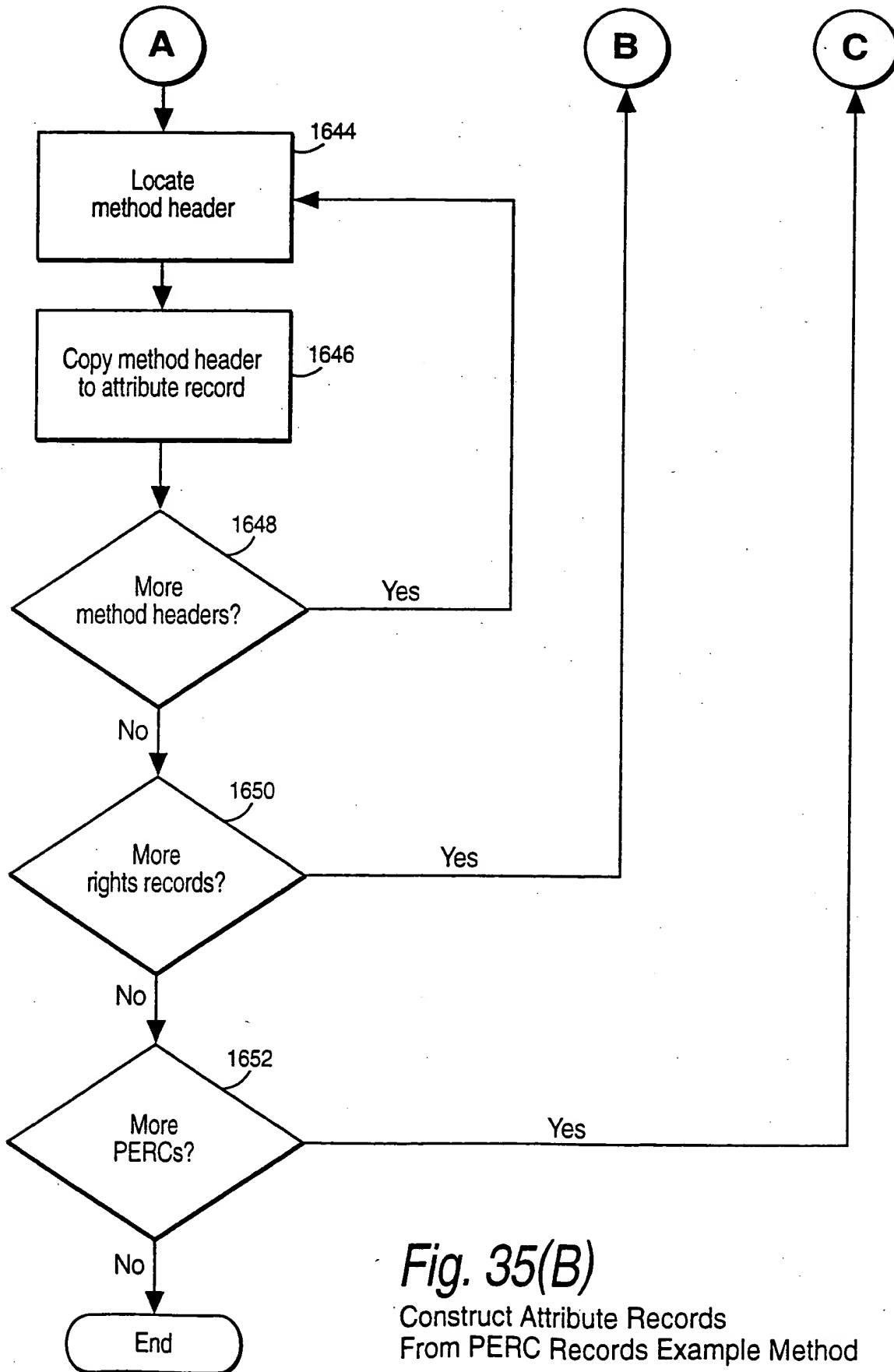
**Fig. 34**

Example Steps For Determining Attributes  
Based On Available Rules And Consequences



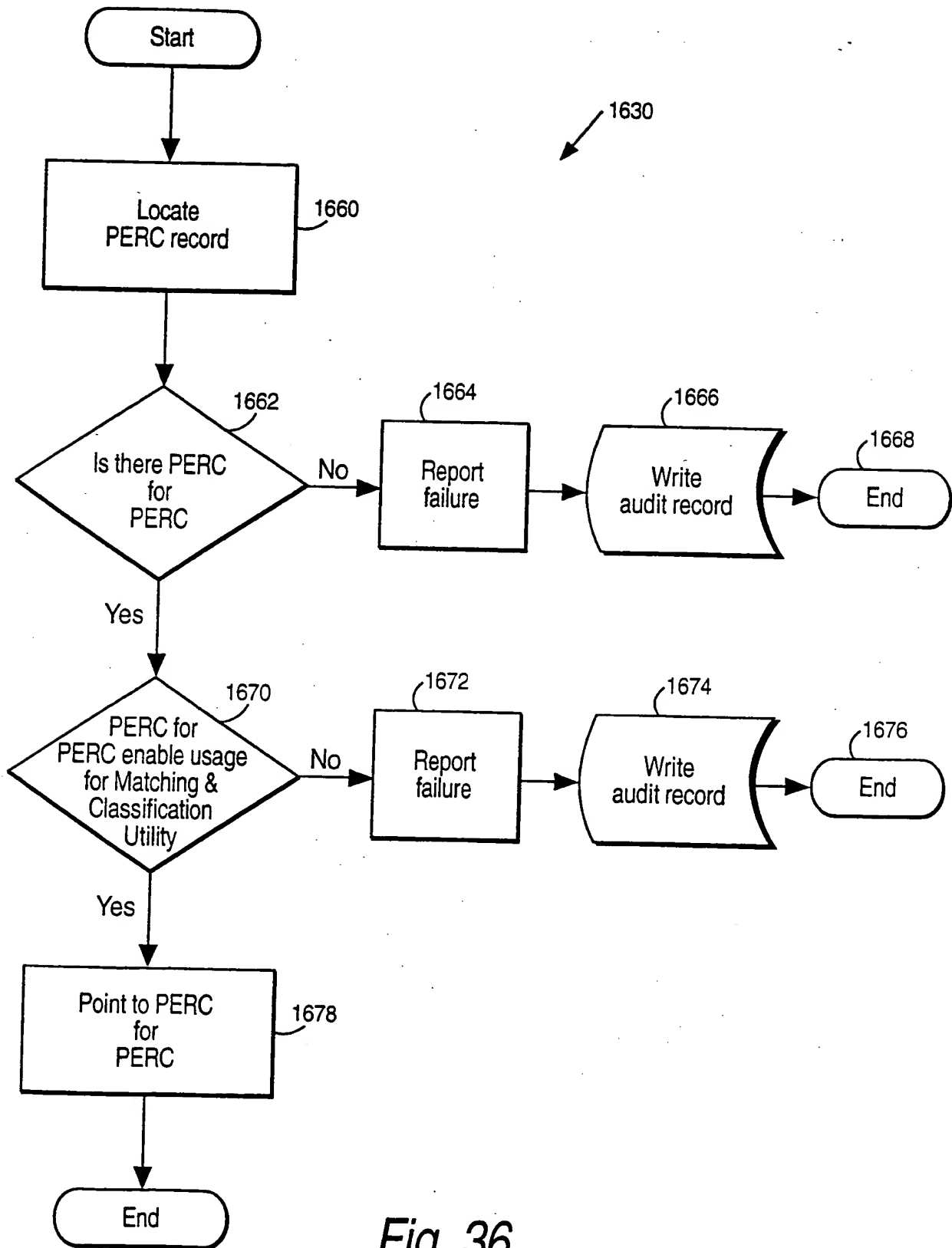
**Fig. 35(A)**

Construct Attribute Records From PERC Records Example Method



**Fig. 35(B)**

Construct Attribute Records  
From PERC Records Example Method



**Fig. 36**

Check Permissions Record Example Steps

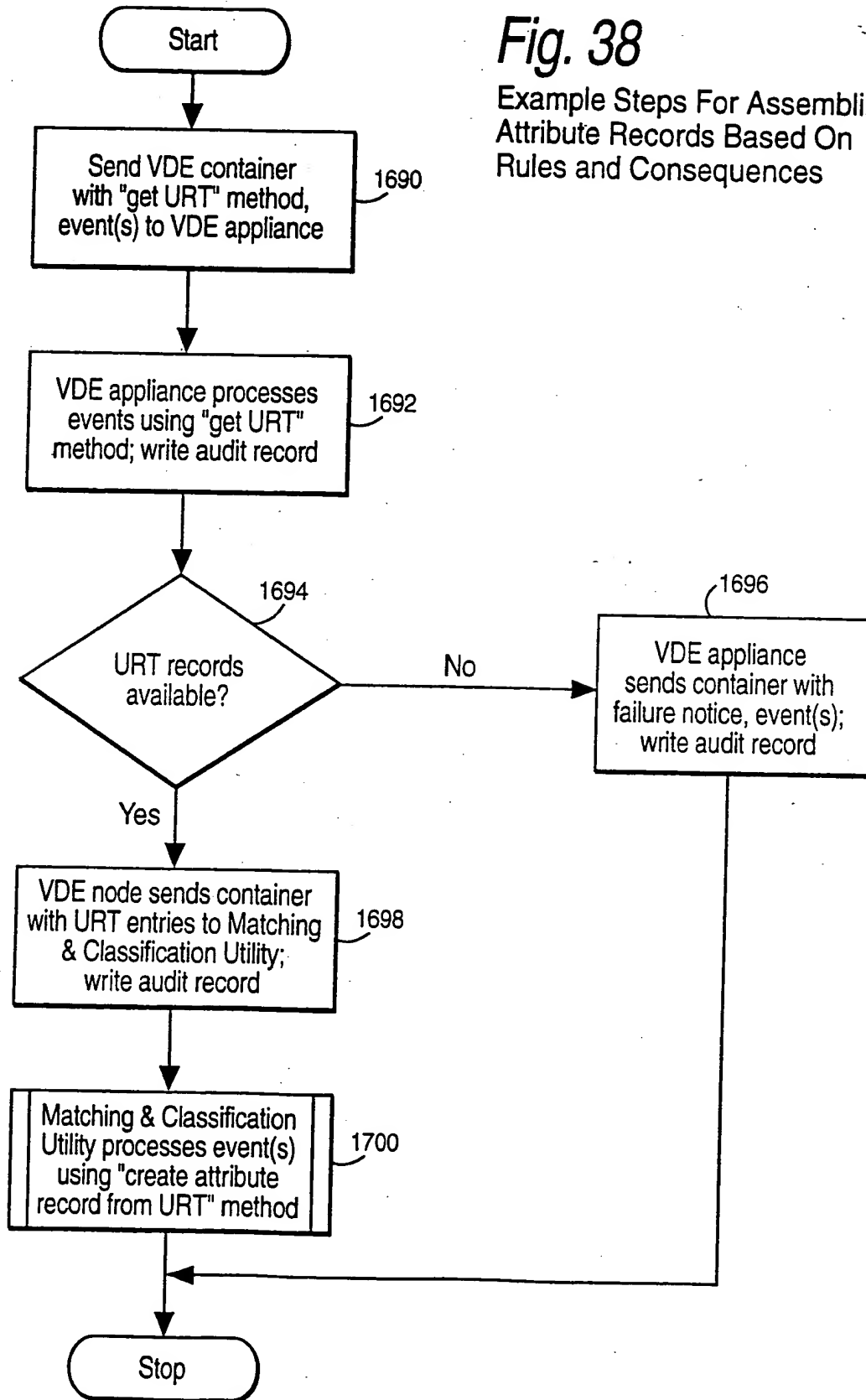
**Fig. 37(B)** Example Attribute Record

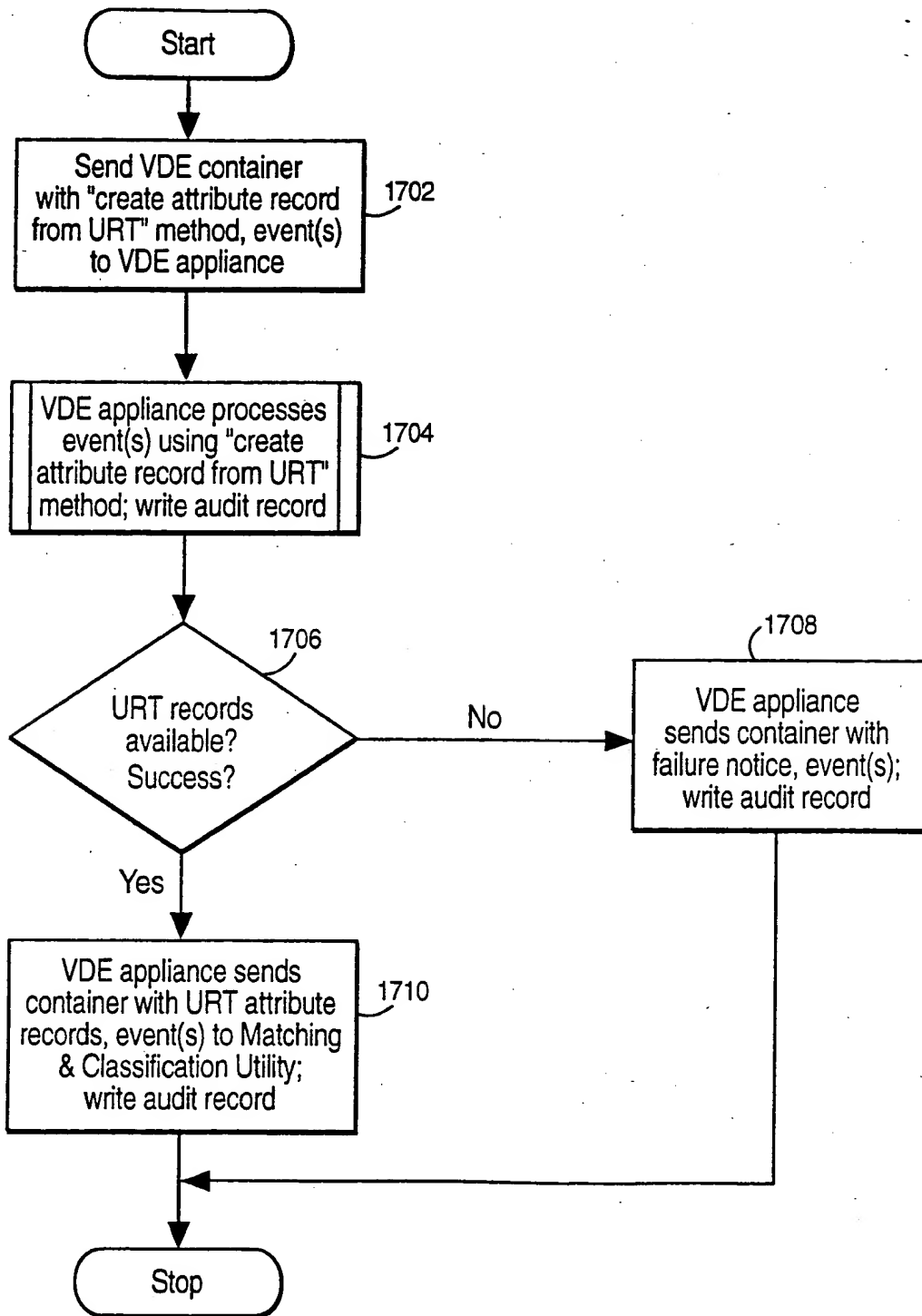
**Fig. 37(C)** Example Attribute Records From PERC Record

User ID number	Object ID	Right ID	Method	Right ID	Method	Right ID	Method	Right ID	Method	Right ID	Method
CF129CD5	1227-33-1298-2	27	239	15	546	81	423	1.00	02	666	601
	1682	1686A	1686B	1686C	1686D	1686E	1686F	1686G	1686H	1686I	1686J

**Fig. 38**

Example Steps For Assembling  
Attribute Records Based On  
Rules and Consequences

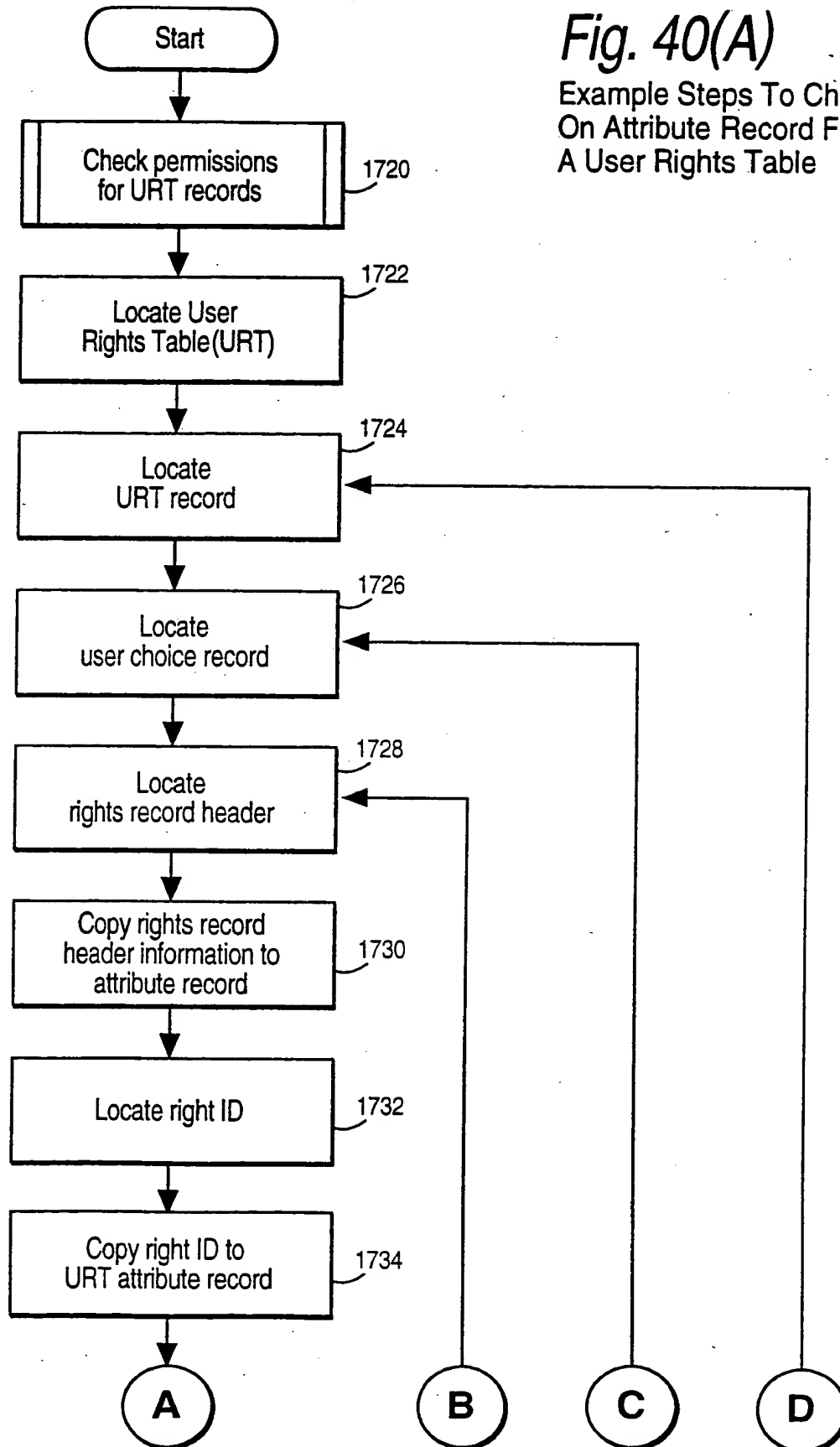




**Fig. 39**

Example Steps For Assembling Attribute Records  
Based On Rules and Consequences





**Fig. 40(A)**

Example Steps To Check  
On Attribute Record From  
A User Rights Table

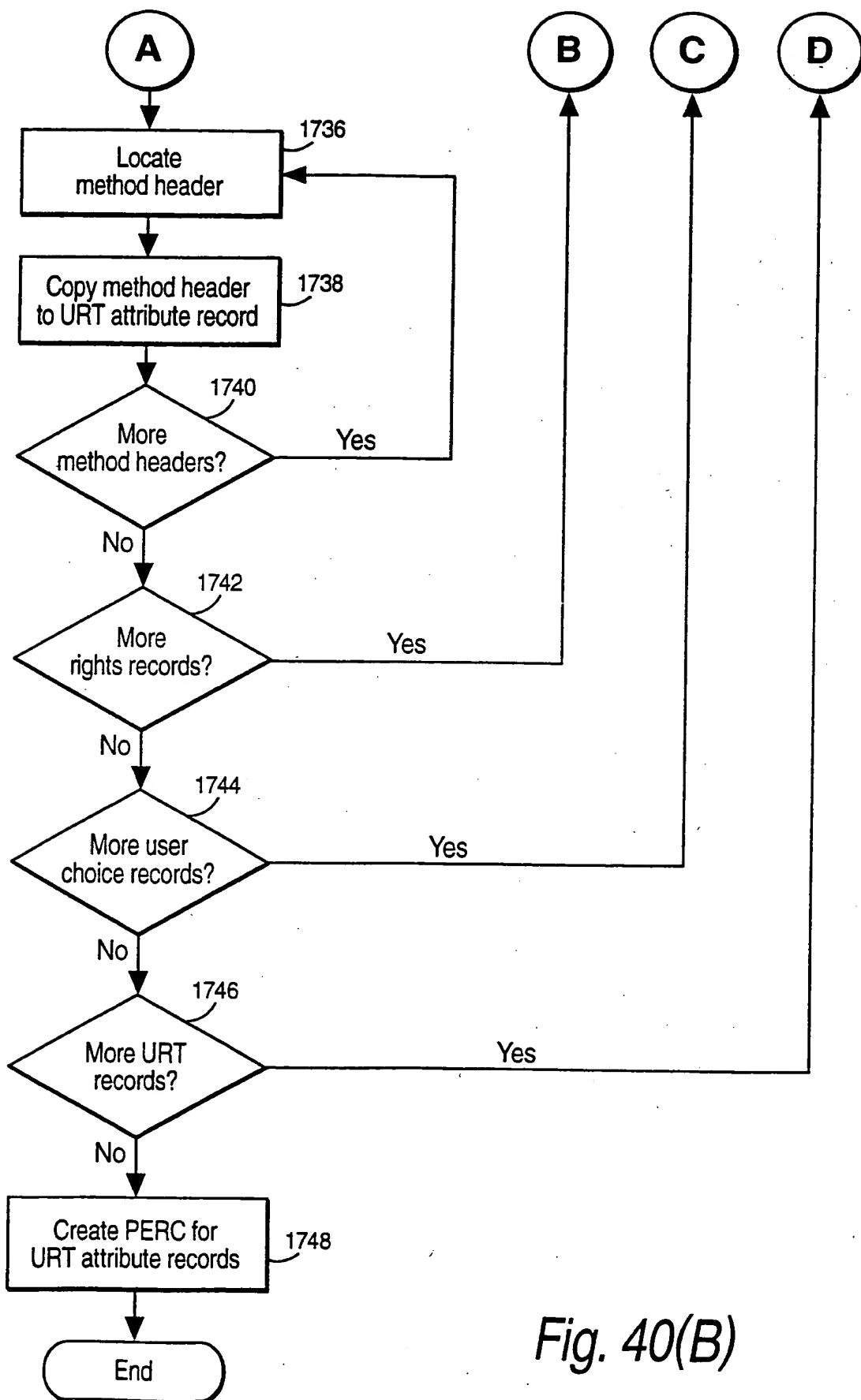
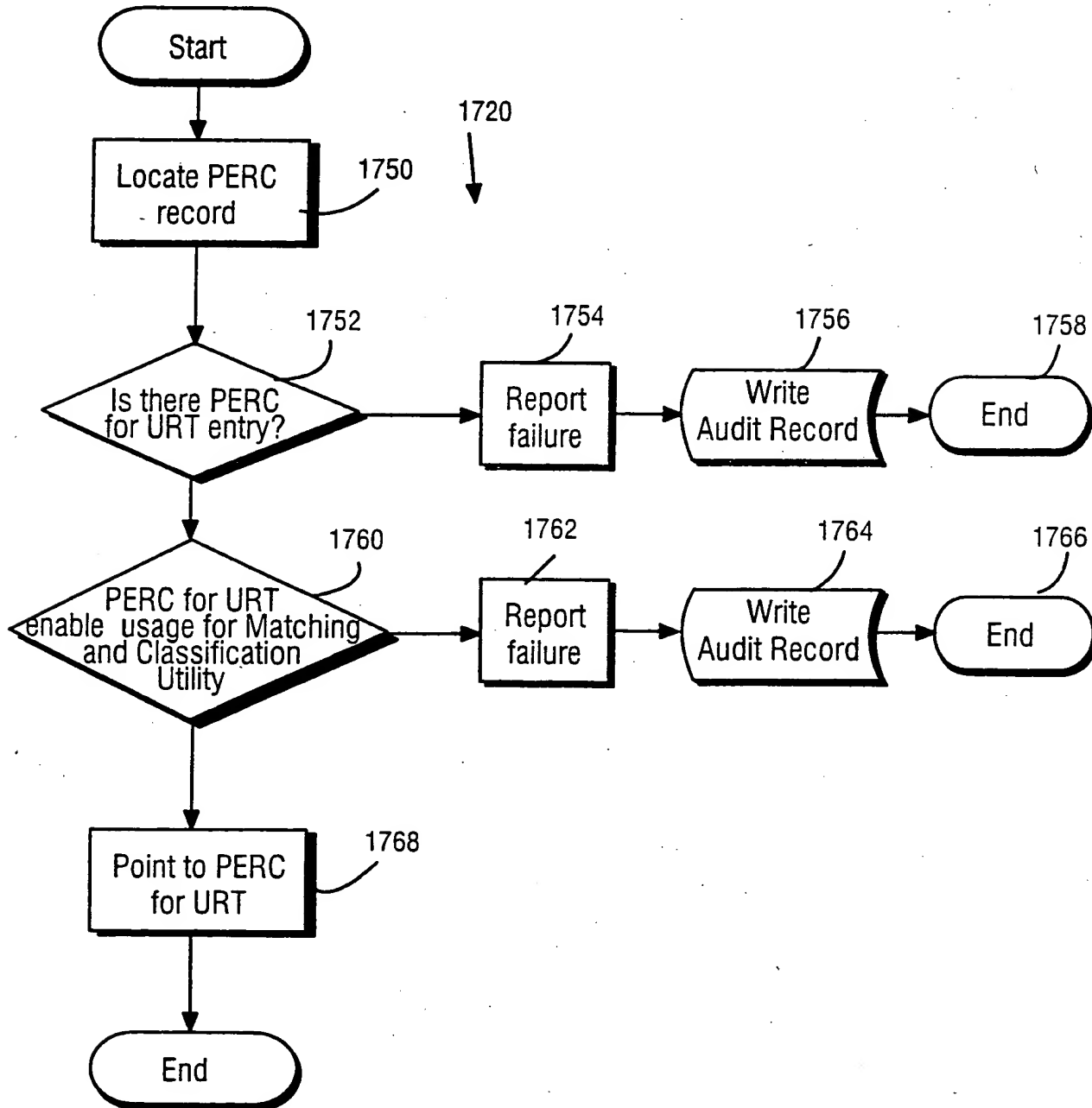


Fig. 40(B)

**Fig. 41**

Contract attribute records from  
PERC records method example



APPROVED	O.G. FIG.	
BY	CLASS	SUBCLASS
DRAFTSMAN		

Fig. 42(A) Example Rights Attribute Record From URT

1770-1

User ID	Object ID	Attr1	Attr2	Attr3	Attr4	Attr5	Attr6	Attr7	Attr8	Attr9	....	Attr N
---------	-----------	-------	-------	-------	-------	-------	-------	-------	-------	-------	------	--------

1772 1774 1776(1) 1776(N)

Fig. 42(B) Example Rights Attribute Record From URT

1770-2

User ID number	Object ID	Right ID	Method	Right ID	Method	Right ID	Method	Right ID	Method	Right ID	Method	....
CF129CD5	1227-33-1298-2	Use	Open	Meter	Each time	Budget	One time purchase	\$1.00	Bill	VISA		

1772 1774 1776A 1776B 1776C 1776D 1776E 1776F 1776G 1776H 1776I

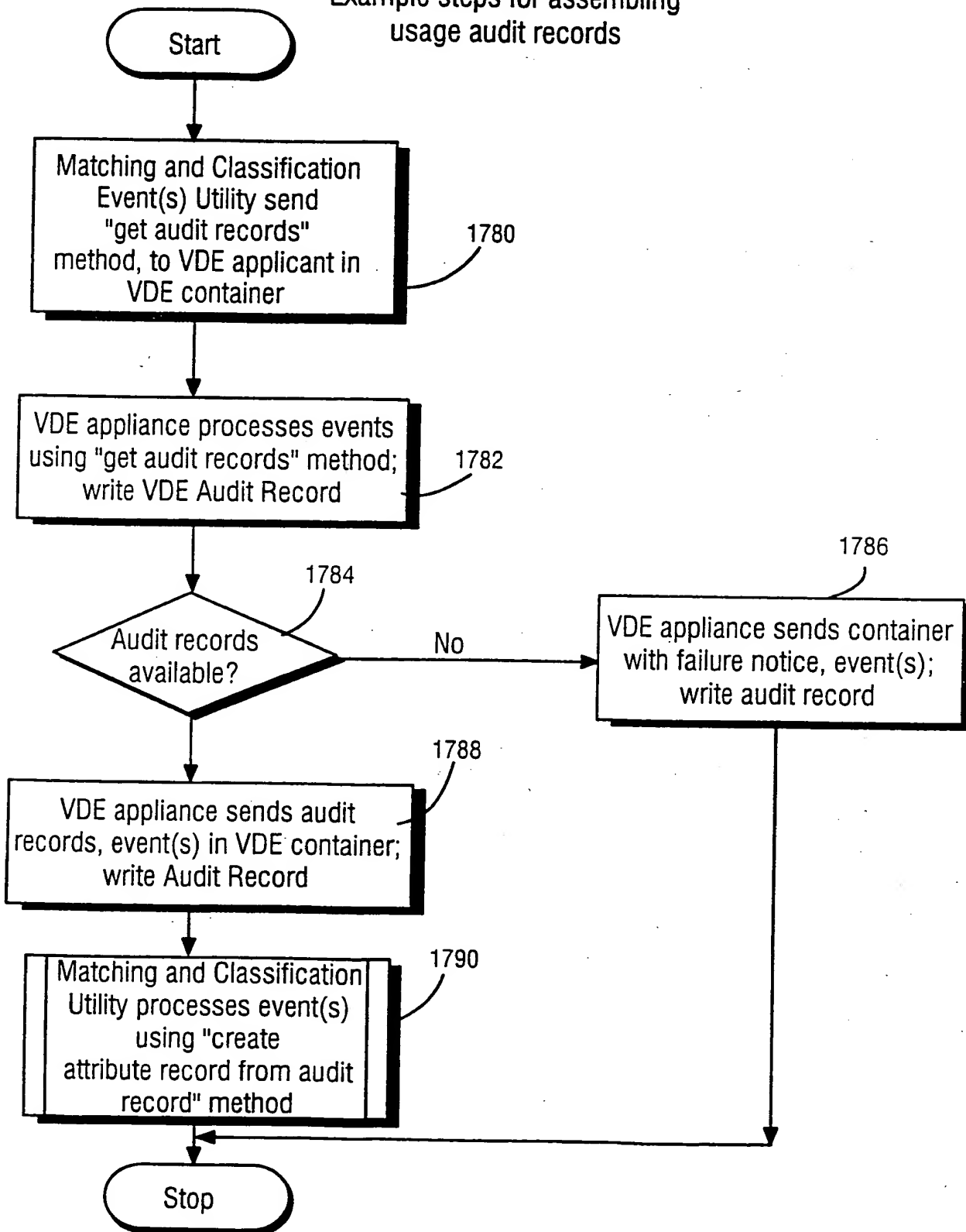
Fig. 42(C) Example User Choice Attribute Records (From URT)

1770-3

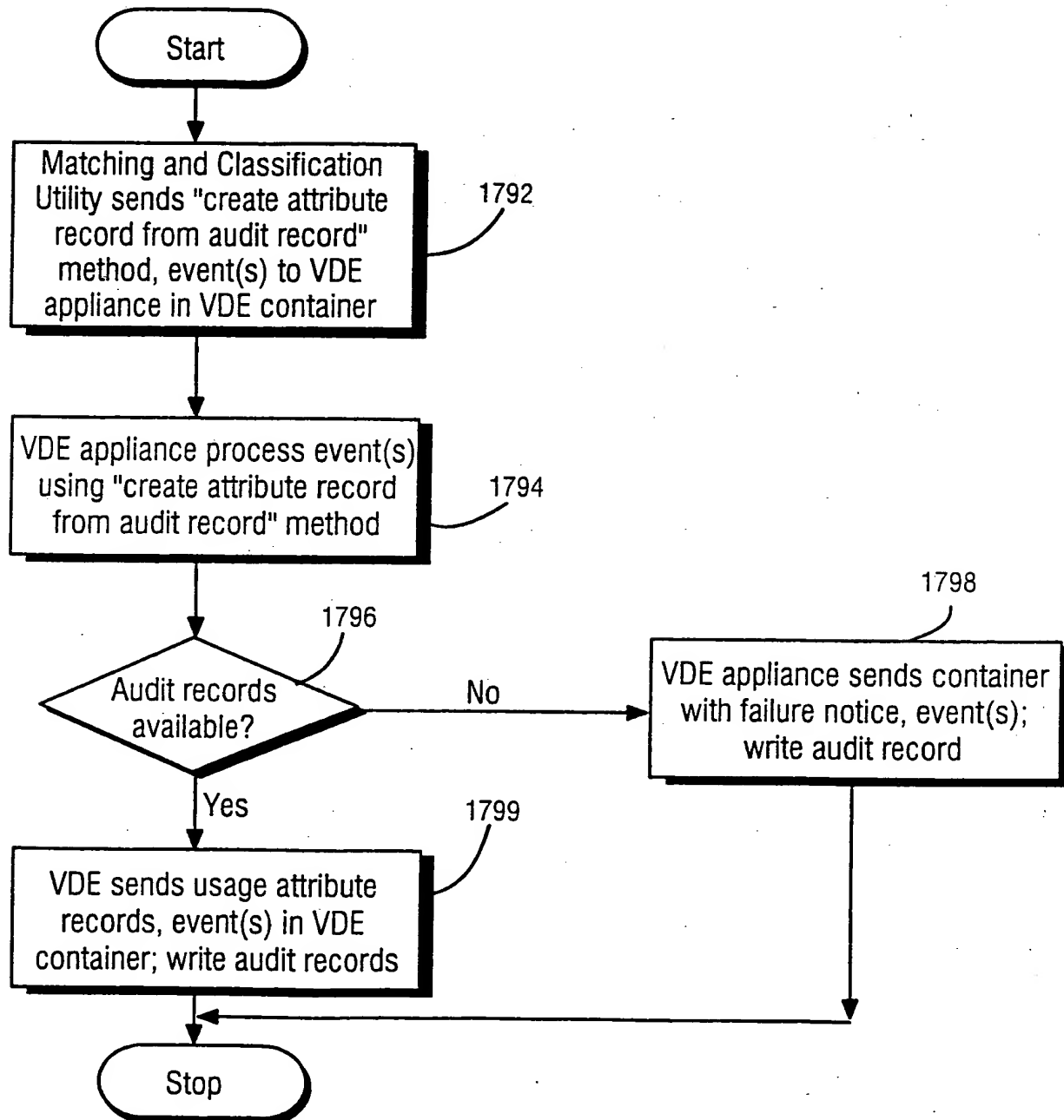
User ID number	Object ID	Right ID	Method	Right ID	Method	Right ID	Method	Right ID	Method	....
CF129CD5	1227-33-1298-2	27	239	15	546	81	423	1.00	02	666

1772 1774 1776A 1776B 1776C 1776D 1776E 1776F 1776G 1776H 1776I

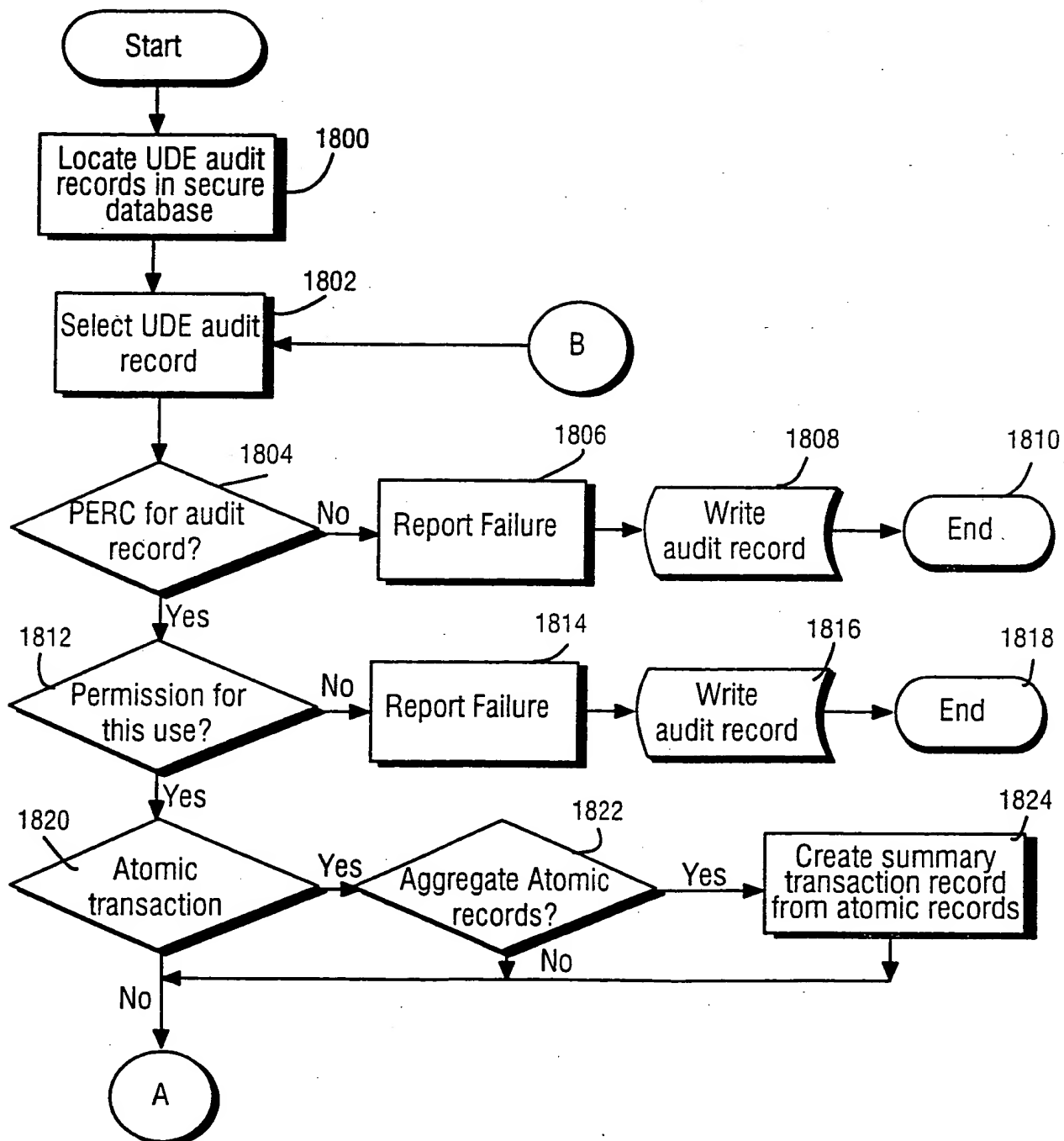
**Fig. 43**  
Example steps for assembling  
usage audit records



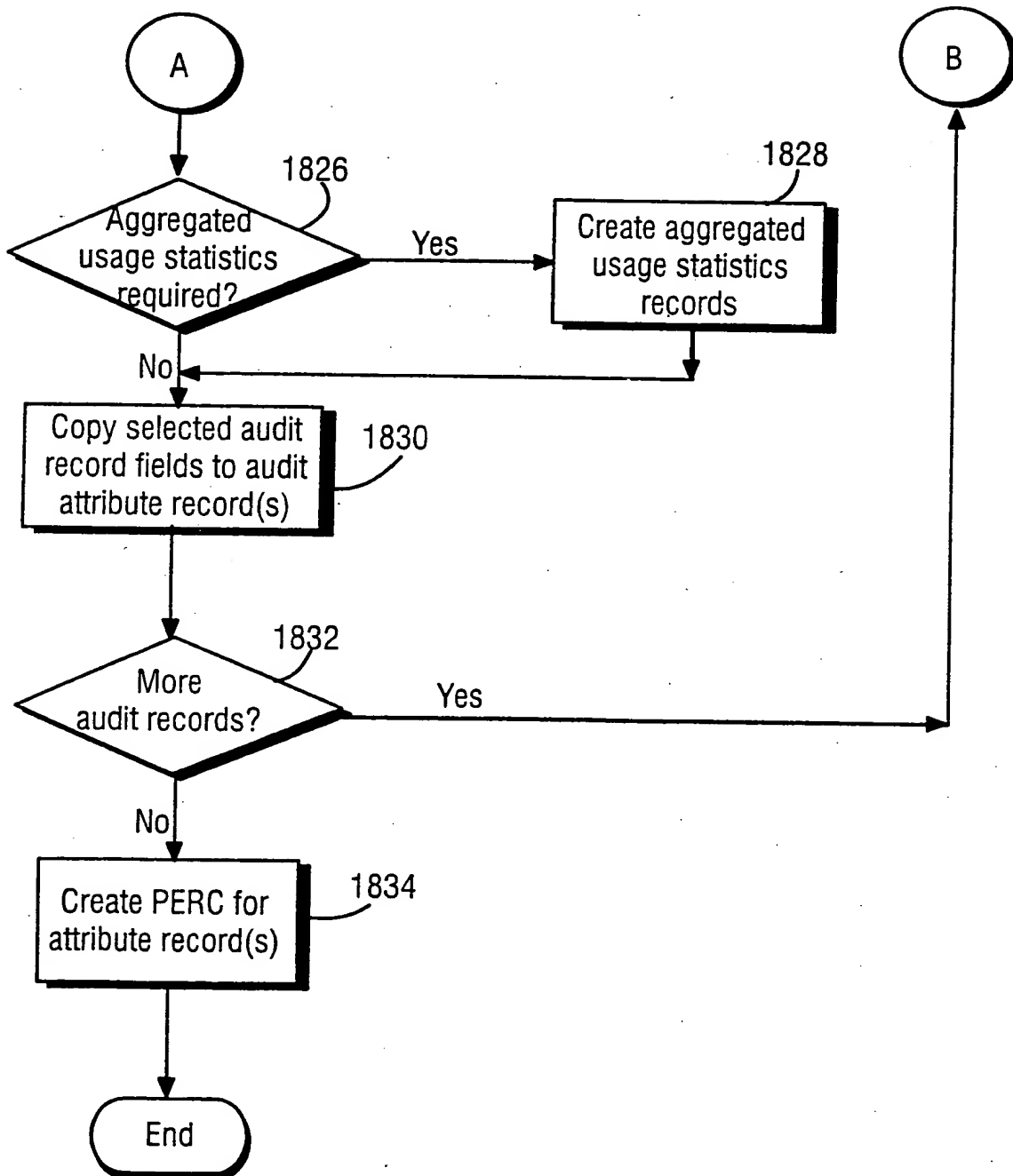
**Fig. 44**  
Example steps for assembling usage  
audit records



**Fig. 45(A)**  
Example steps to create audit  
attribute records



**Fig. 45(B)**  
Example steps to create audit  
attribute records





**Fig. 46(A)** Example Usage Attribute Record From UDE Audit Record

1830-1

User ID	Object ID	Attr1	Attr2	Attr3	Attr4	Attr5	Attr6	Attr7	Attr8	Attr9	....	Attr N
1832	1834	1836(1)										1836(N)

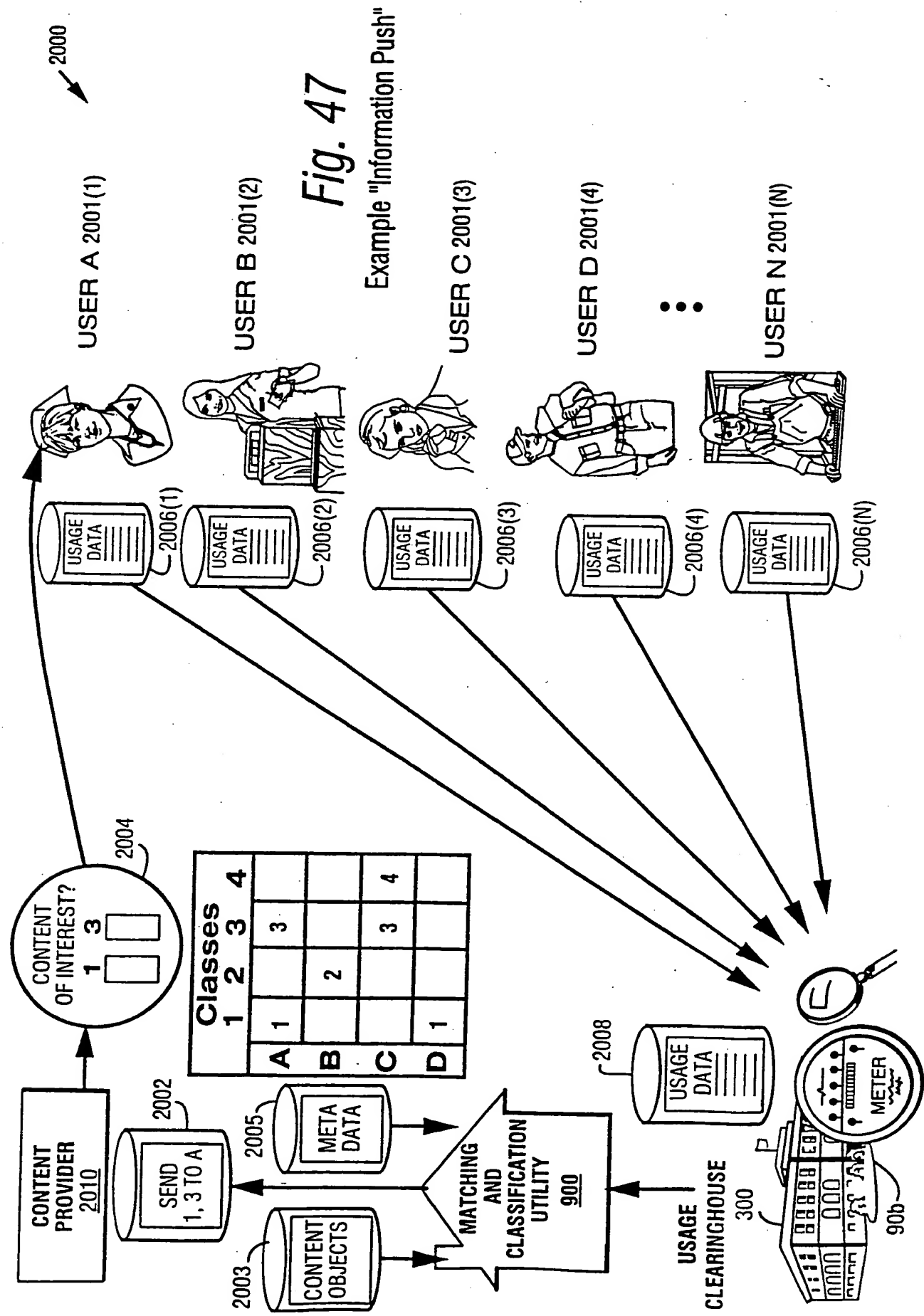
**Fig. 46(B)** Example Usage Attribute/Statistics Records From UDE Audit Records

1830-2

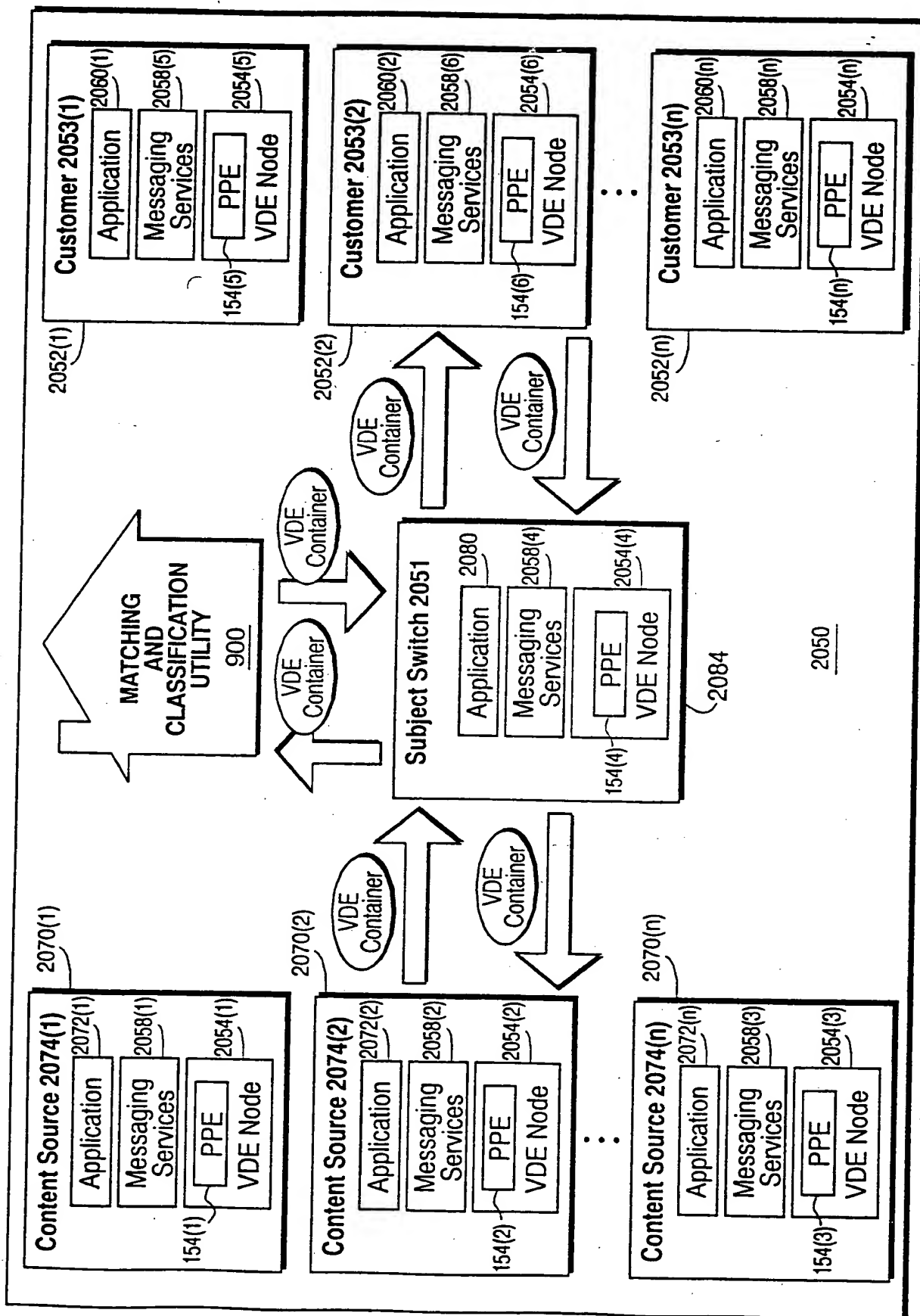
User ID number	Object ID	Right ID	Method	Right ID	Method	Number opens	Right ID	Method	Right ID	Method	Method
1832	1834	1836A	1836B	1836C	1836D	1836E	1836F	1836G	1836H	1836I	1836J
CF129CD5	1227-33-1298-2	Use	Open	Meter	Each time	4	Budget	One time purchase	Bill	\$1.00	VISA
...											

Account number	First use date	First use time	Most recent use date	Most recent use time
1836K	1836L	1836M	1836N	1836O
xxxx-yyyyyy-zzzzzzzzzzzzz	12/30/95	18:22:30 EST	01/04/96	20:14:01
...				

000020-69286460



000020-69266600



**Fig. 47(A)** Matching and Classification Utility 900 Supports "Push" models using Subject Switching and Messaging Services



2300

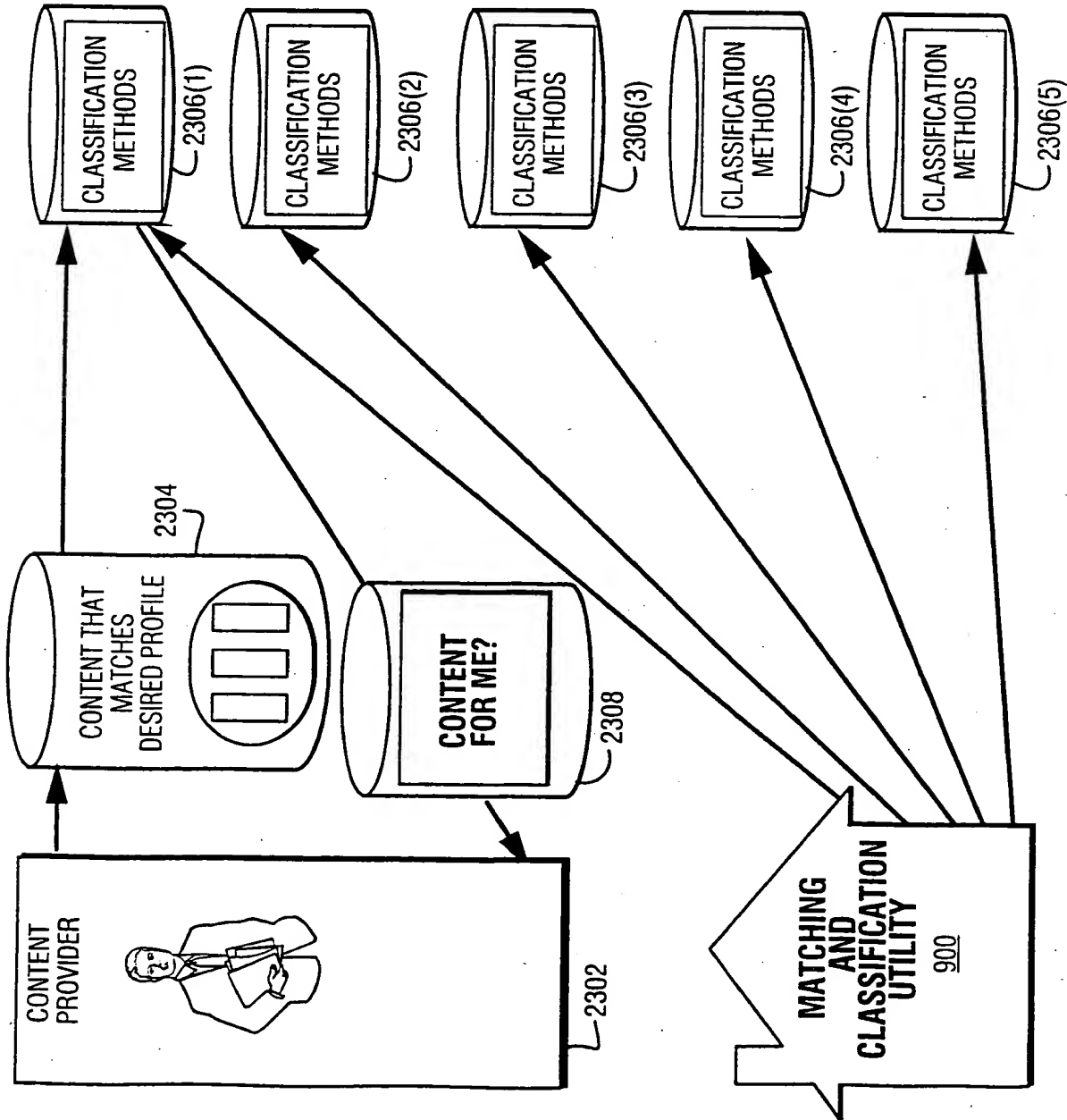
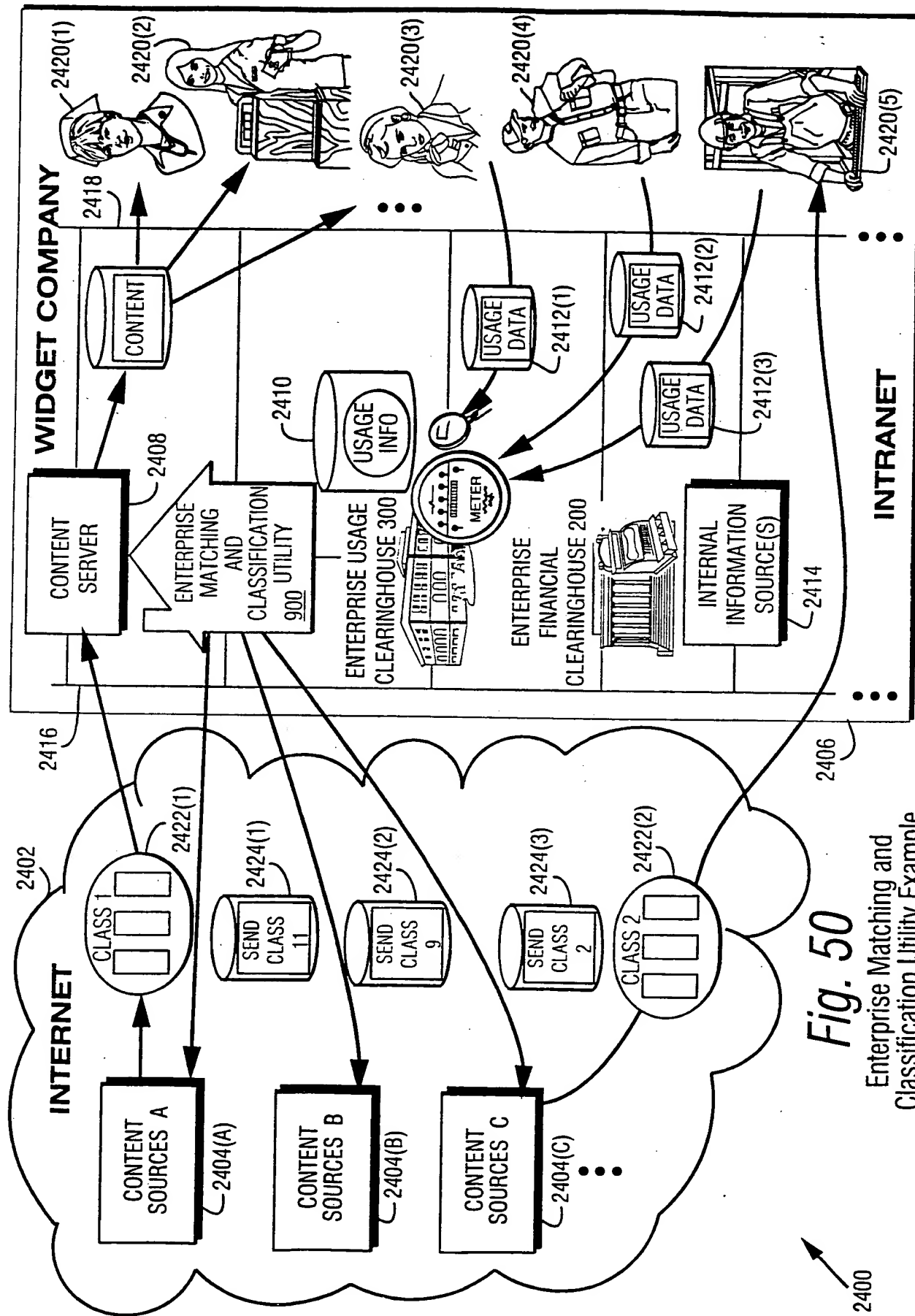
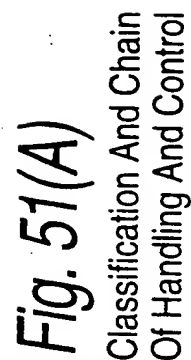
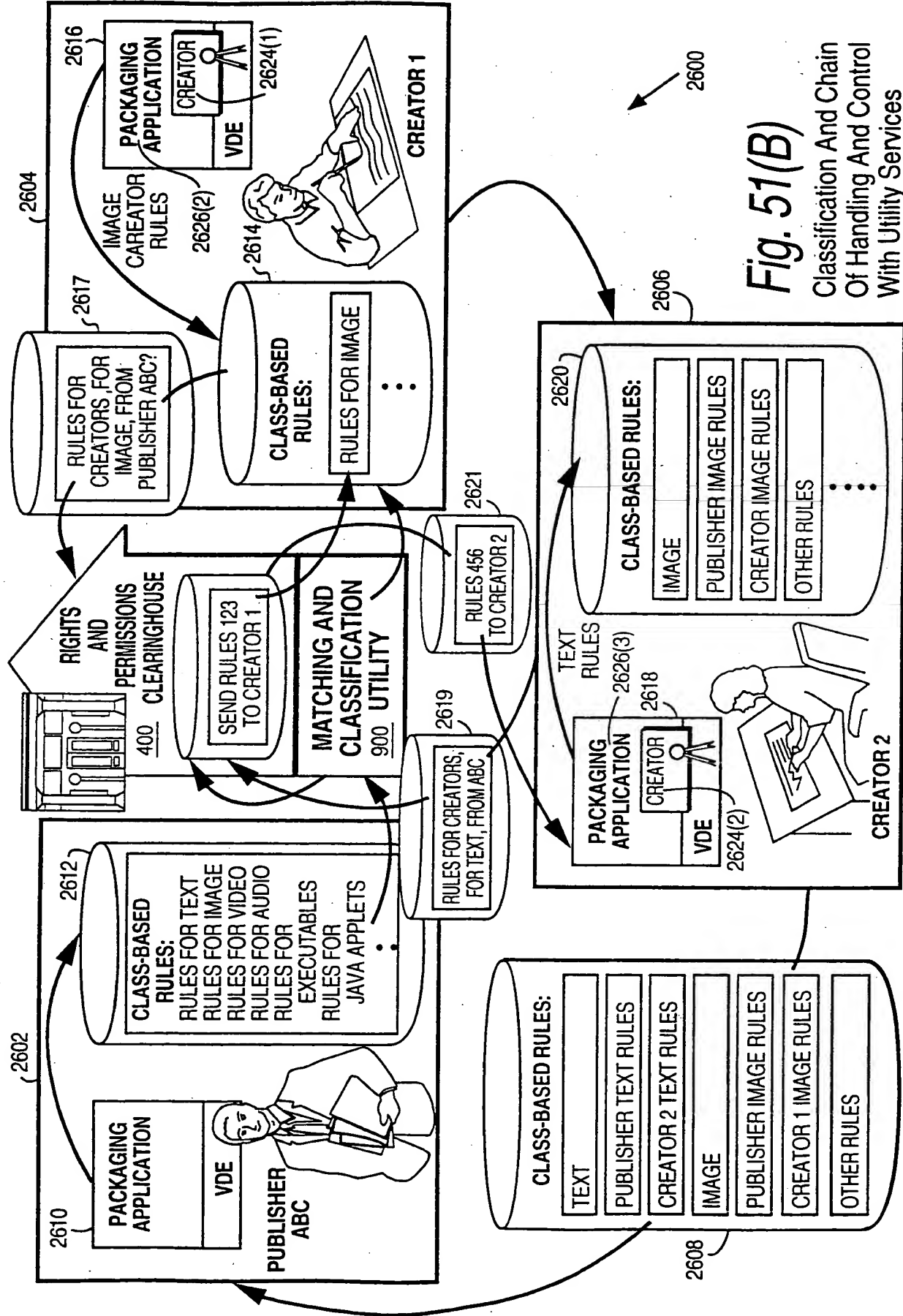


Fig. 49 Example "Consumer Pull"



**Fig. 50**  
Enterprise Matching and  
Classification Utility Example





**Fig. 51(B)**  
Classification And Chain  
Of Handling And Control  
With Utility Services



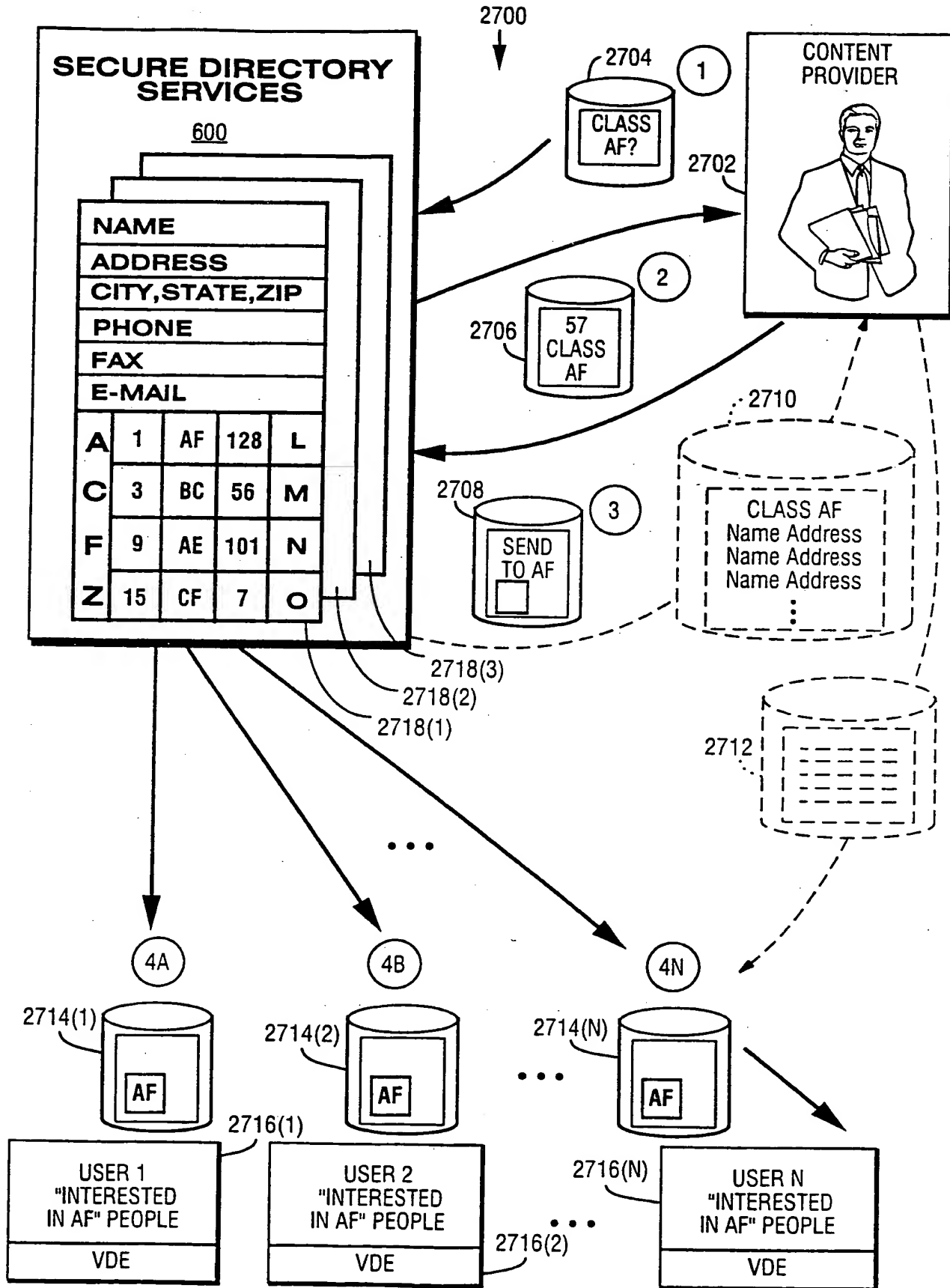
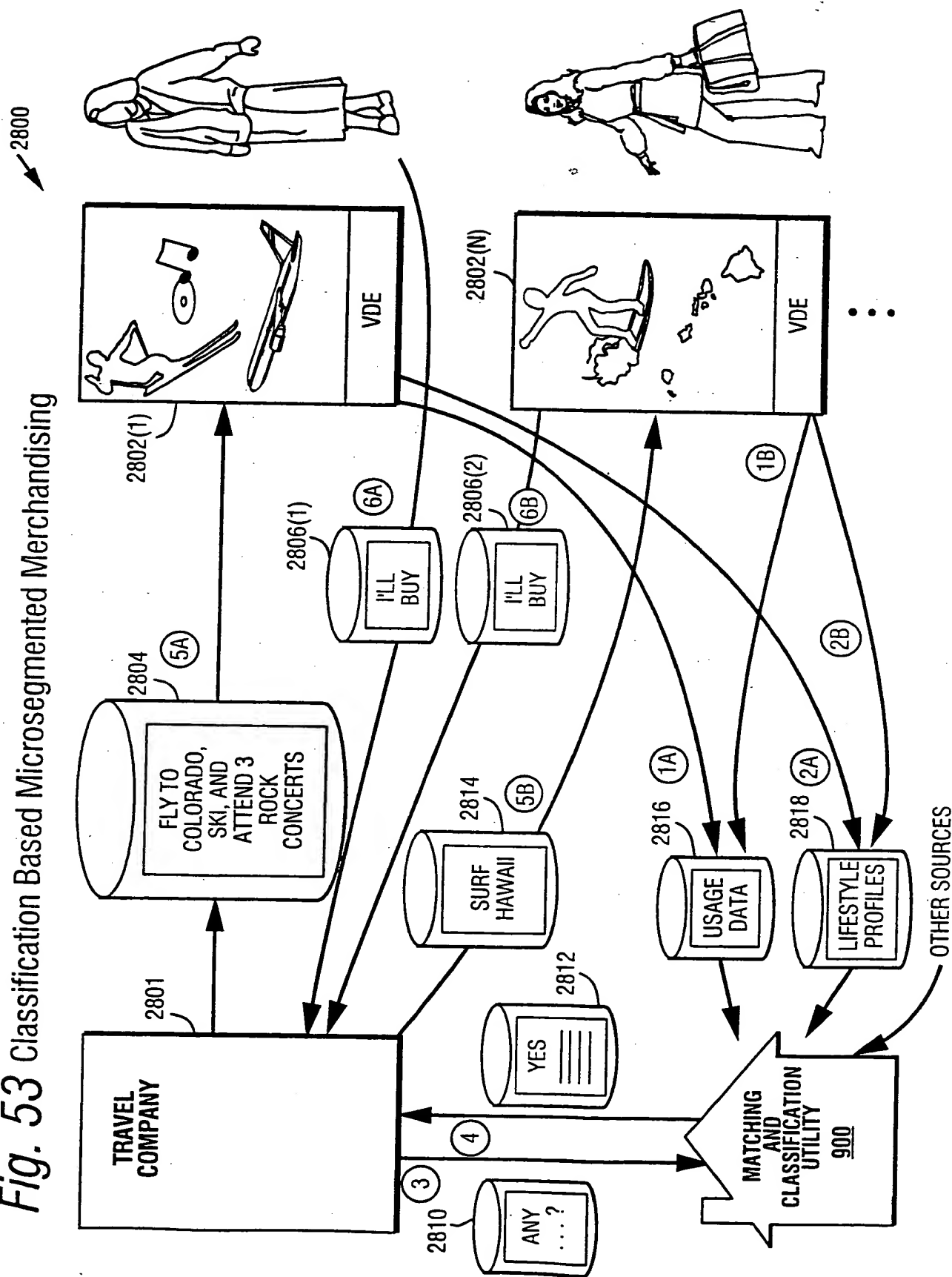
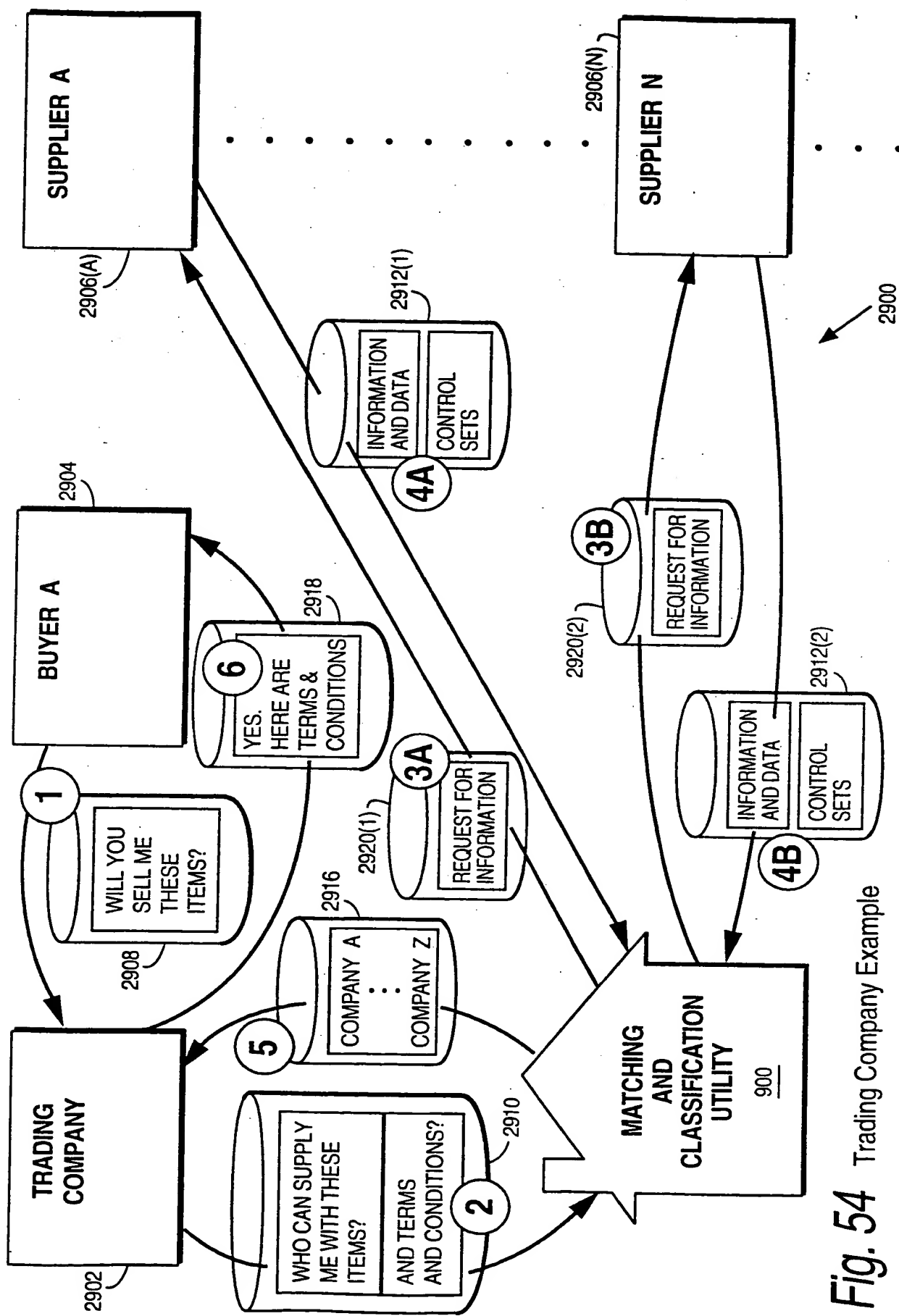


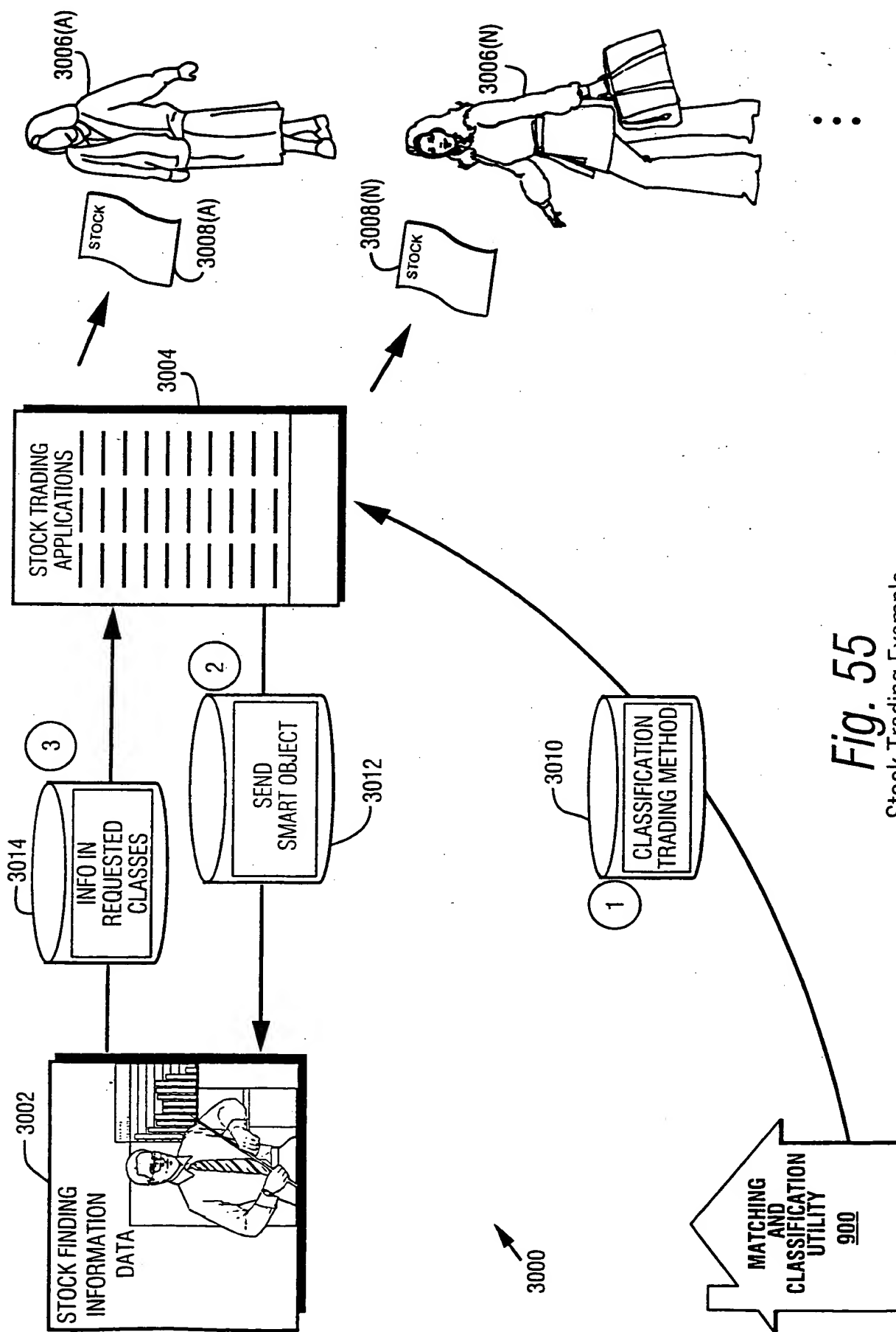
Fig. 52 Secure Directory Services

Fig. 53 Classification Based Microsegmented Merchandising

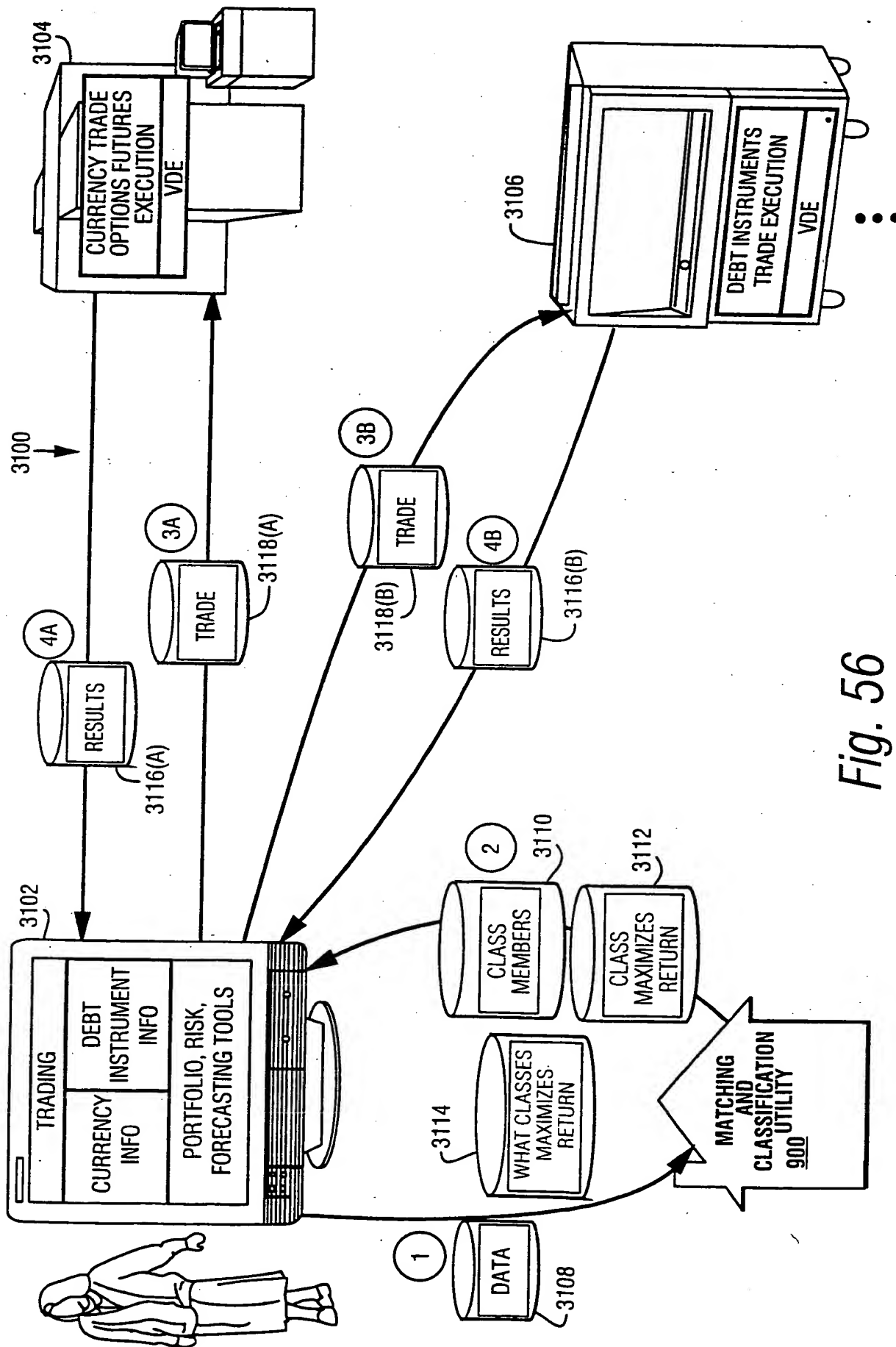




**Fig. 54** Trading Company Example

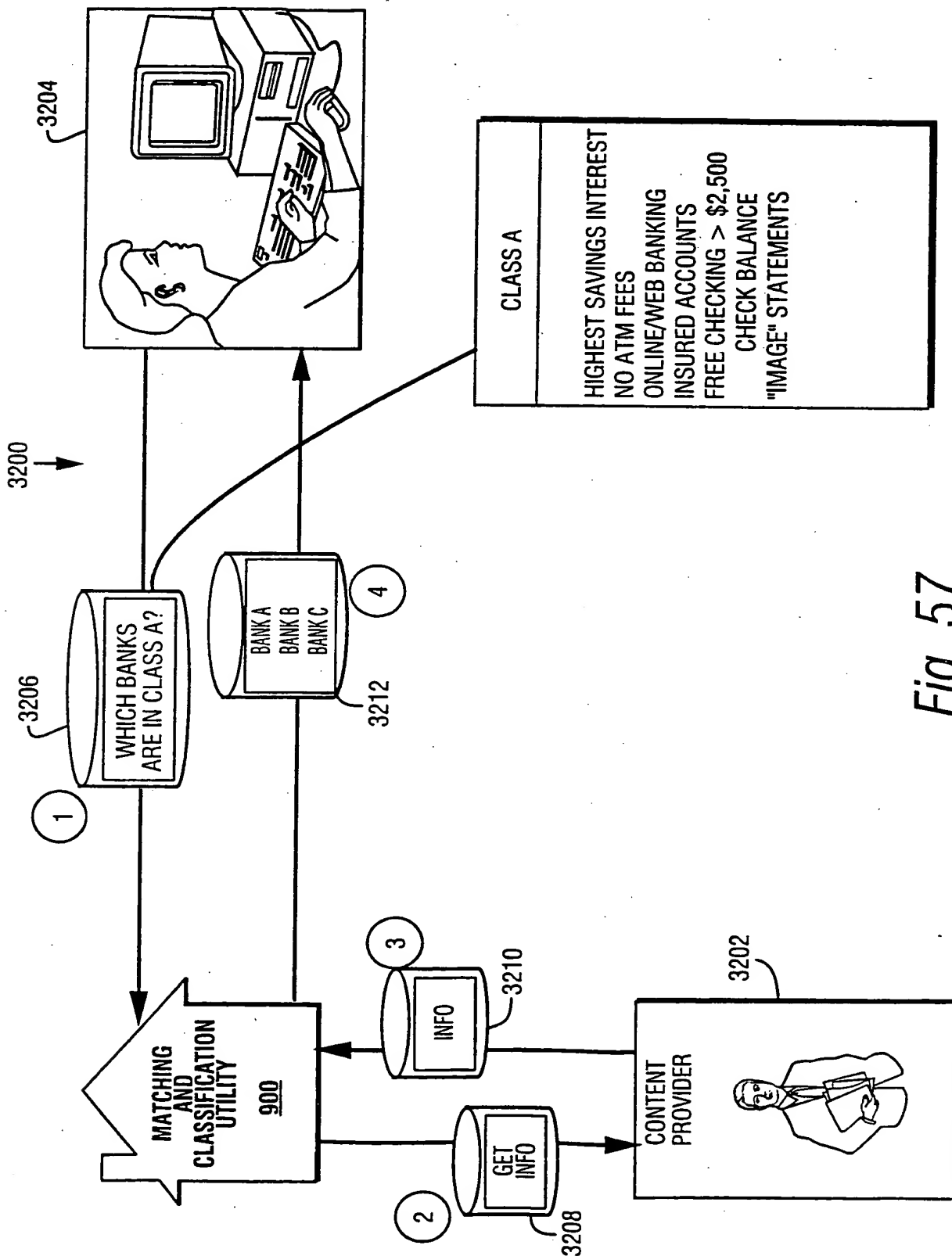


**Fig. 55**  
Stock Trading Example



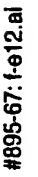
**Fig. 56**

Currency Trading Example

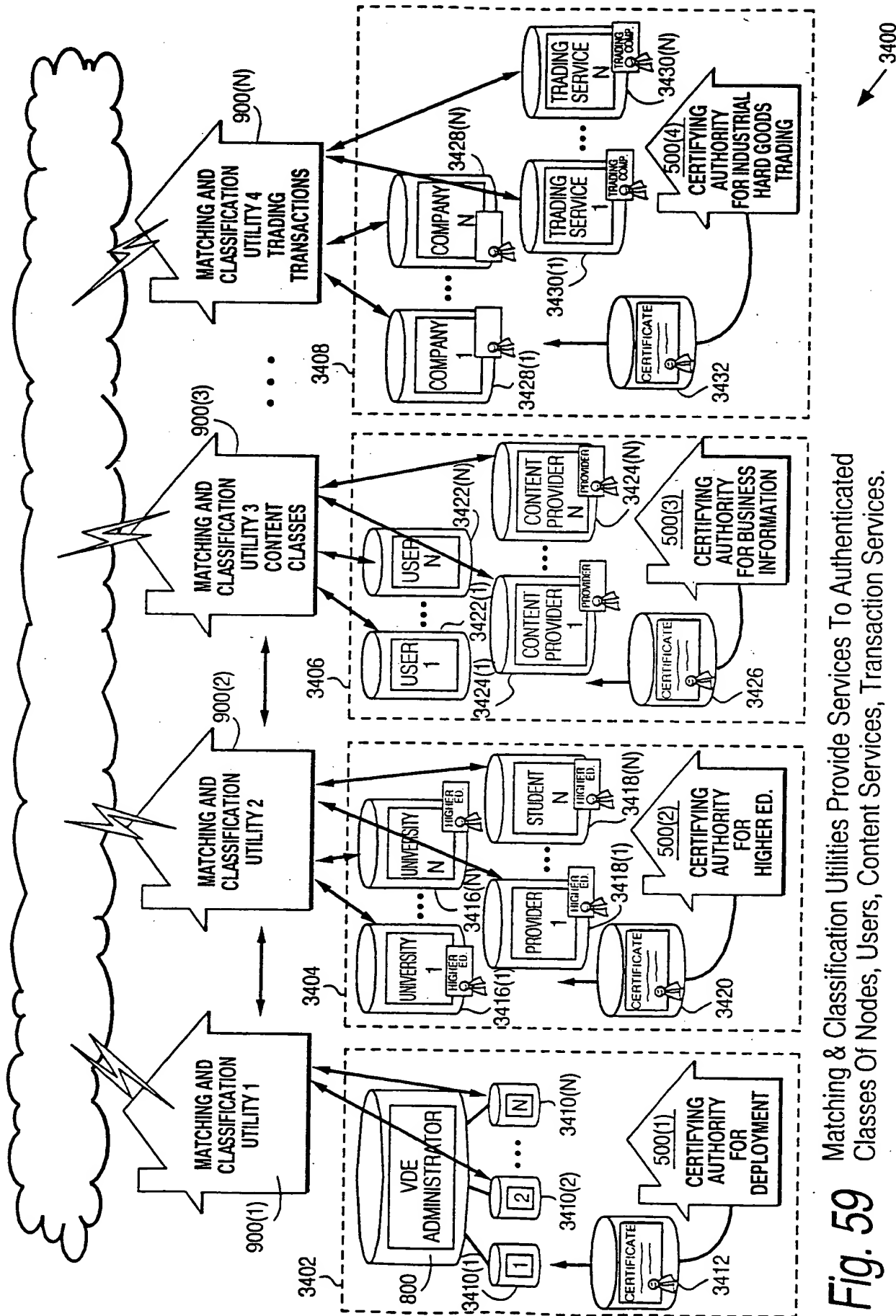


**Fig. 57**

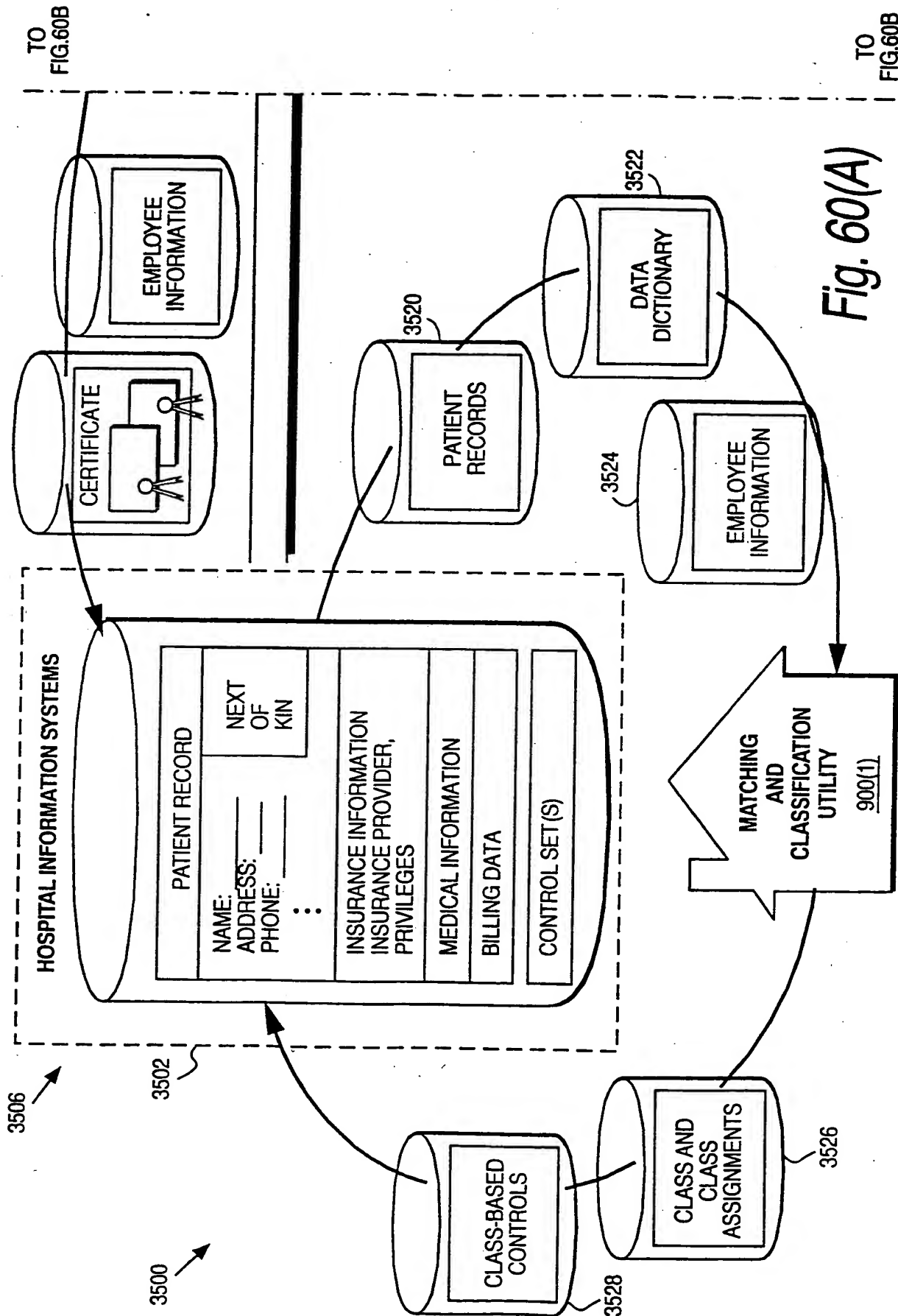
Consumer Banking Example Locating Services In A Class!



**Fig. 58** Software Distribution Example









000020-69266160

APPROVED	O.G. FIG.	
BY	CLASS	SUBCLASS
DRAFTSMAN		

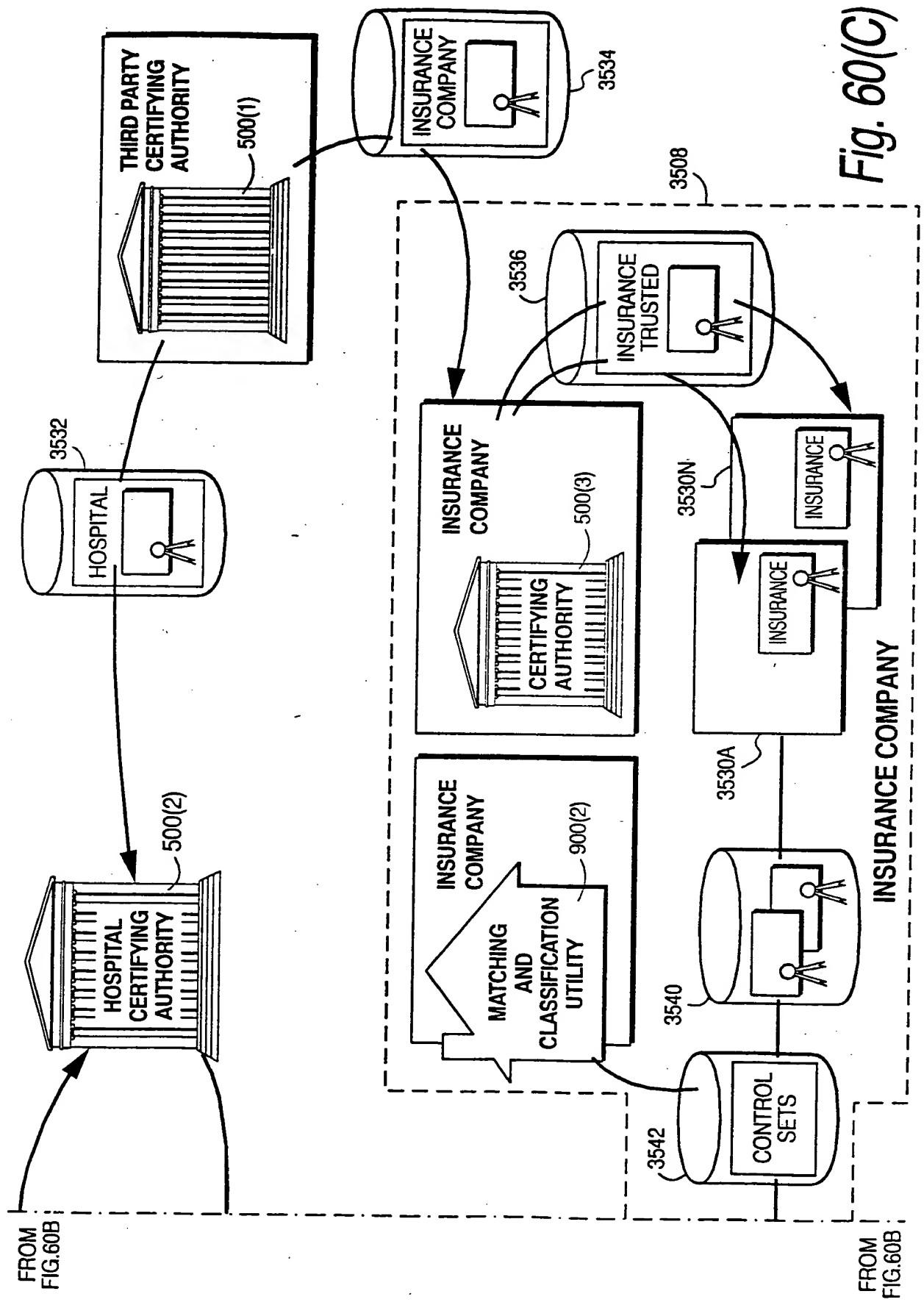


Fig. 60(C)

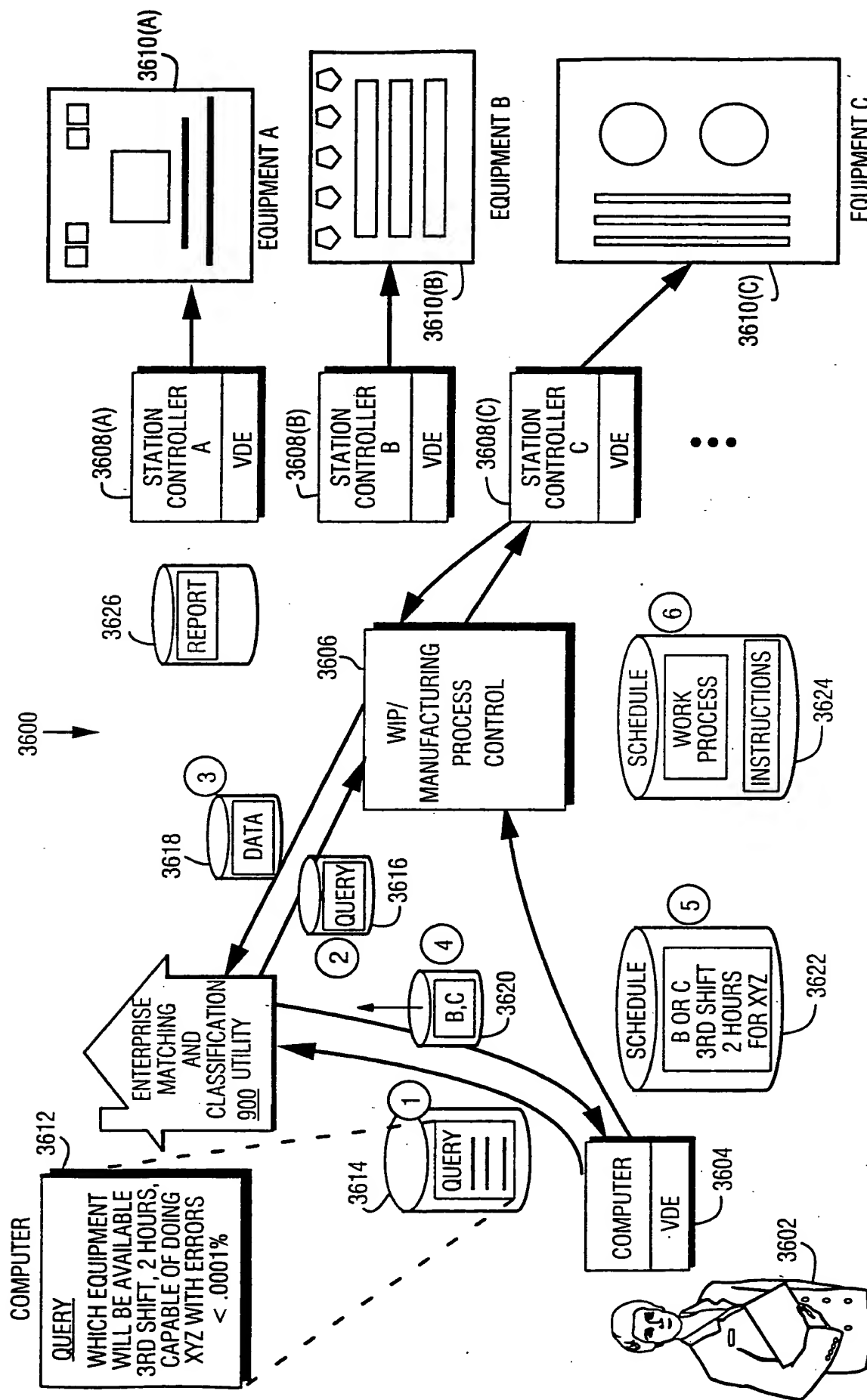
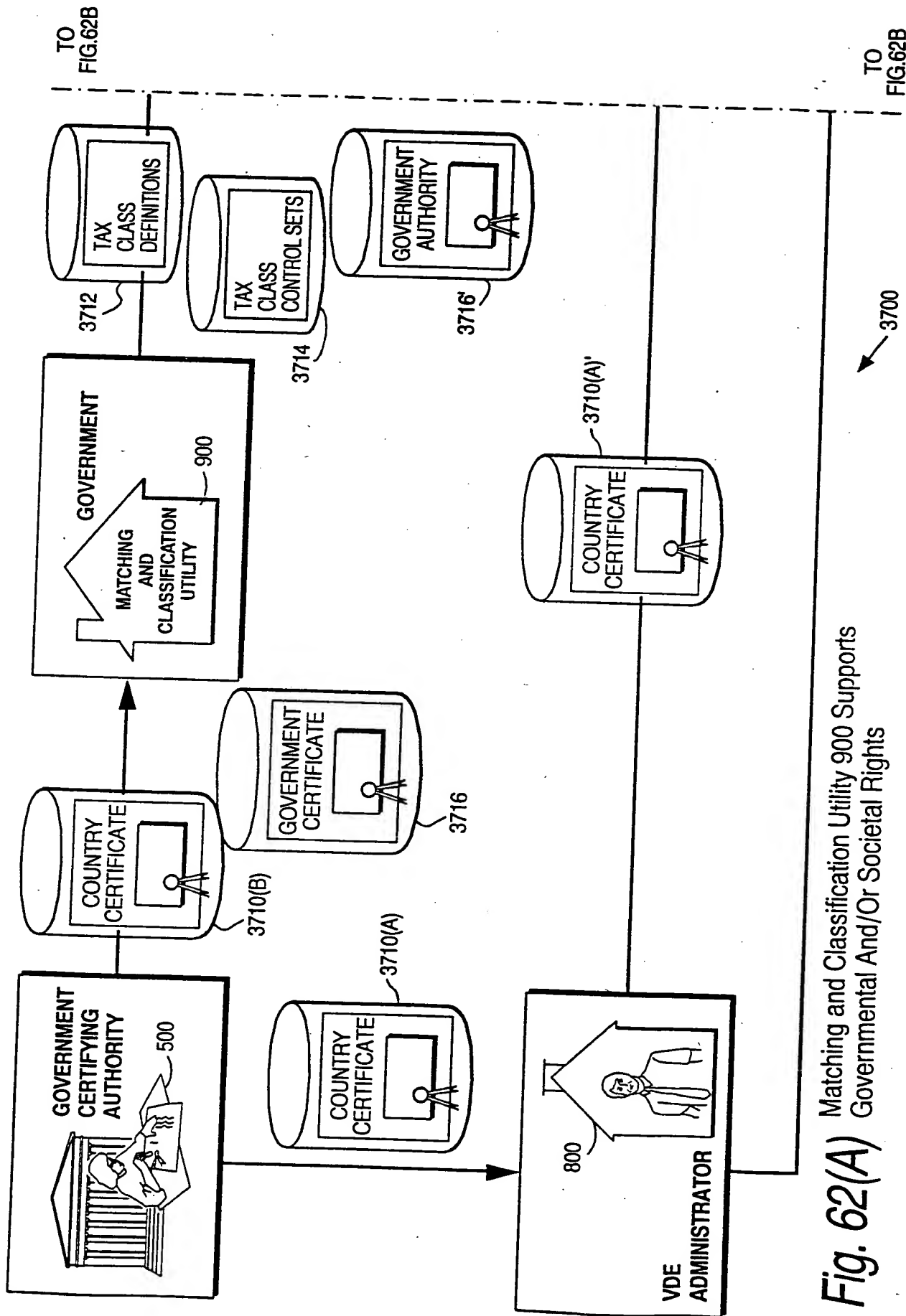


Fig. 61 Workflow Example



**Fig. 62(A)** Matching and Classification Utility 900 Supports Governmental And/Or Societal Rights

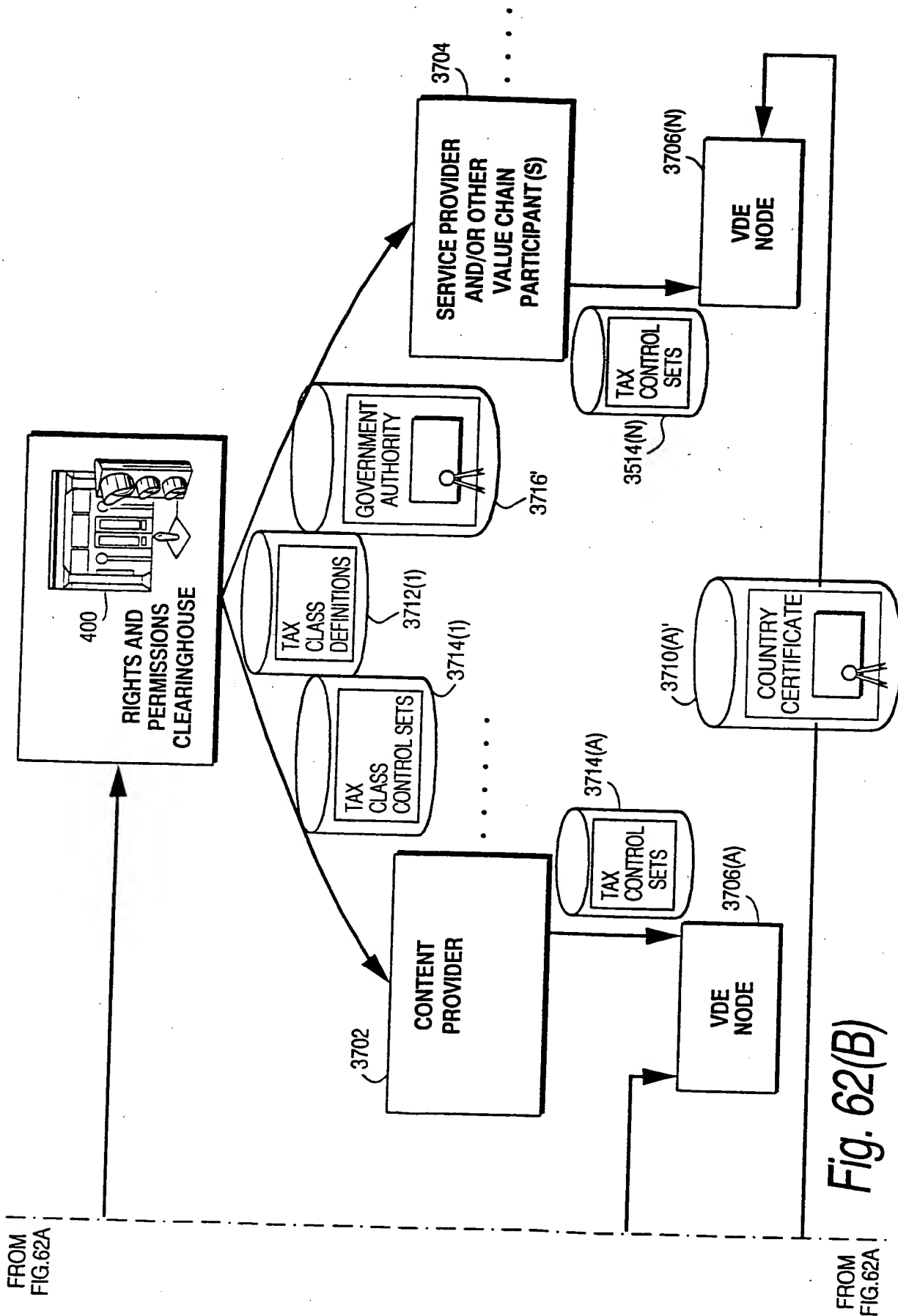


Fig. 62(B)

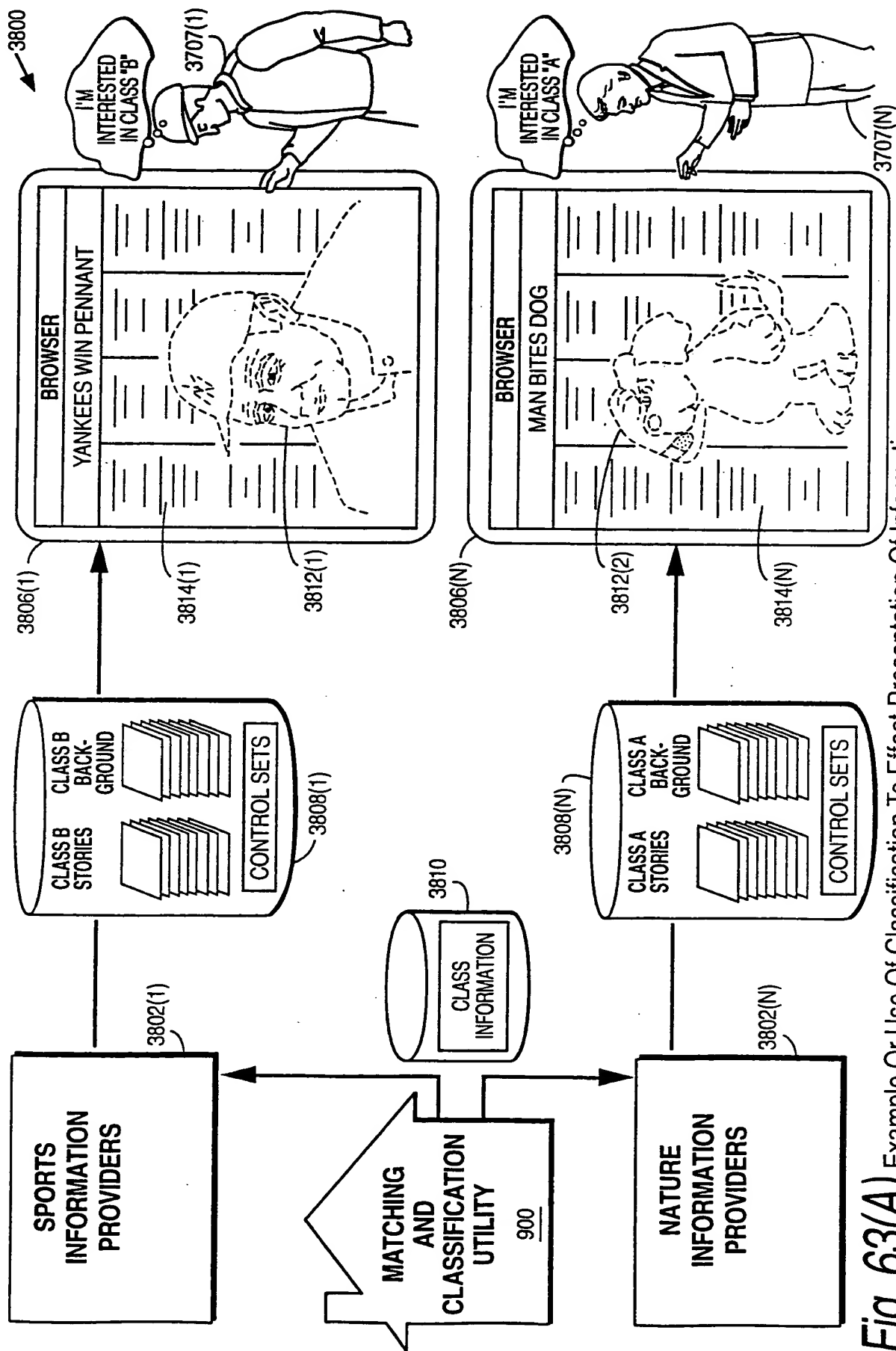


Fig. 63(A) Example Or Use Of Classification To Effect Presentation Of Information.

000020-09286160

APPROVED	O.G. FIG.	
BY	CLASS	SUBCLASS
DRAFTSMAN		

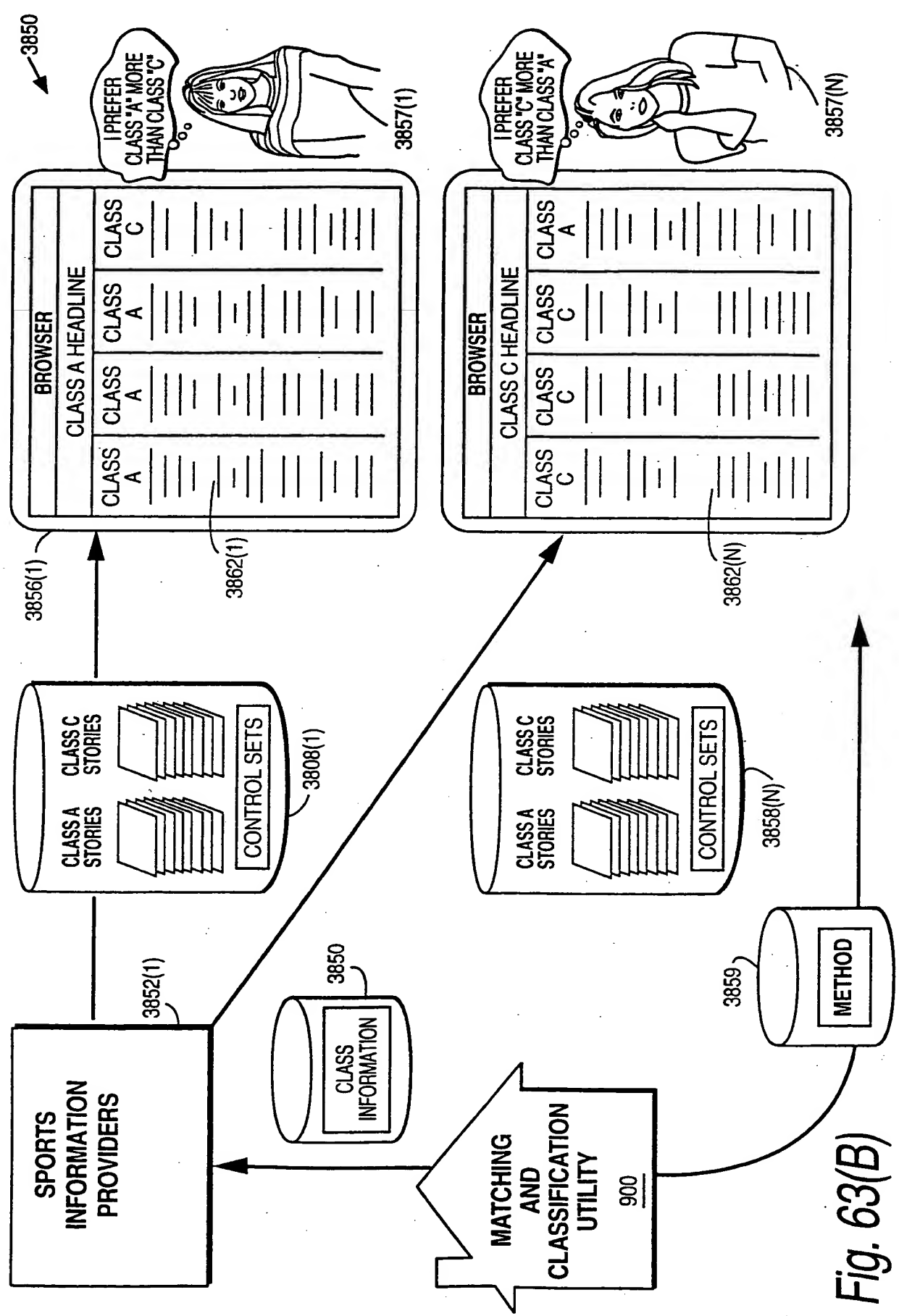
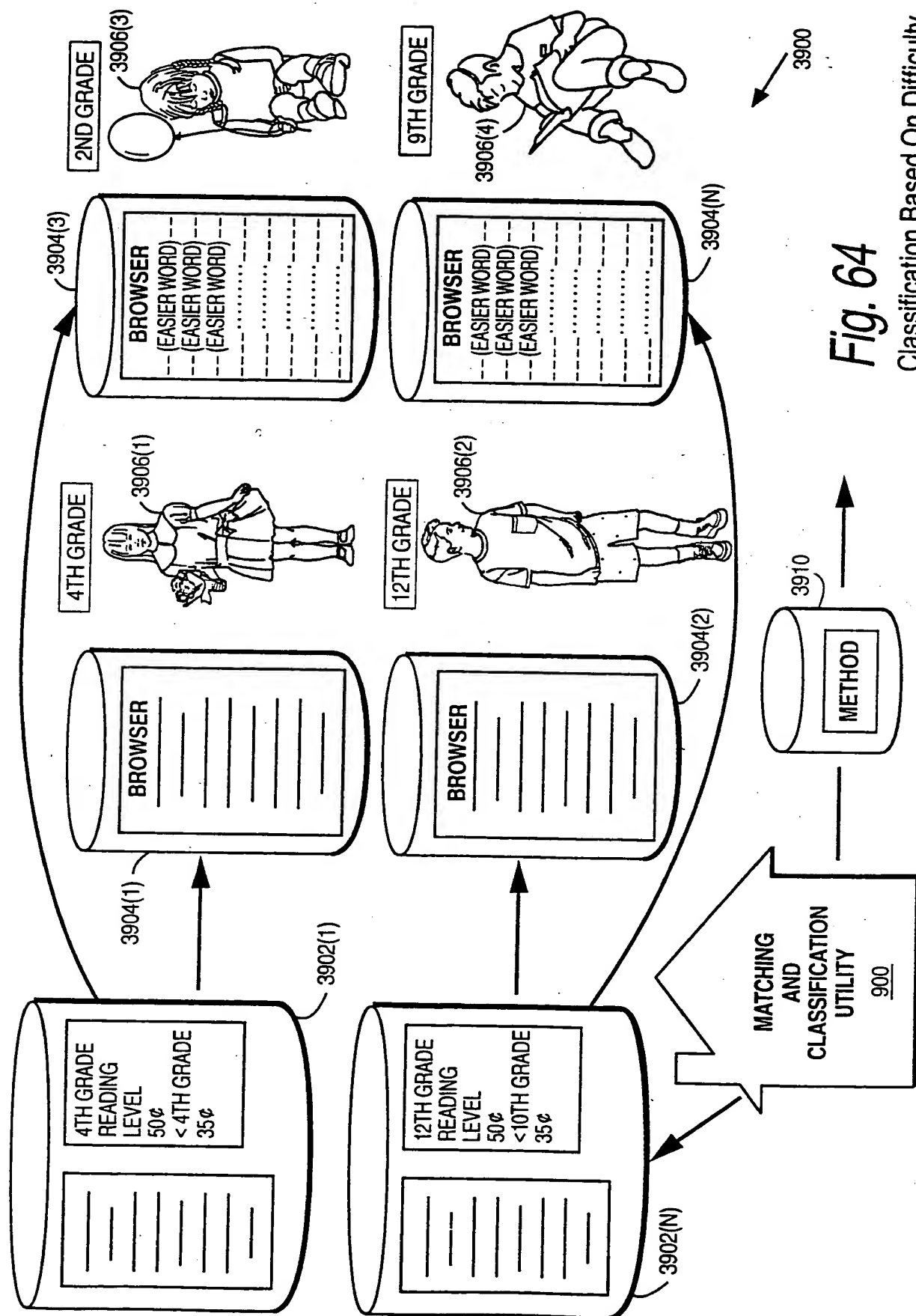


Fig. 63(B)





**Fig. 64**

Classification Based On Difficulty

APPROVED	O.G. FIG.	
BY	CLASS	SUBCLASS
DRAFTSMAN		

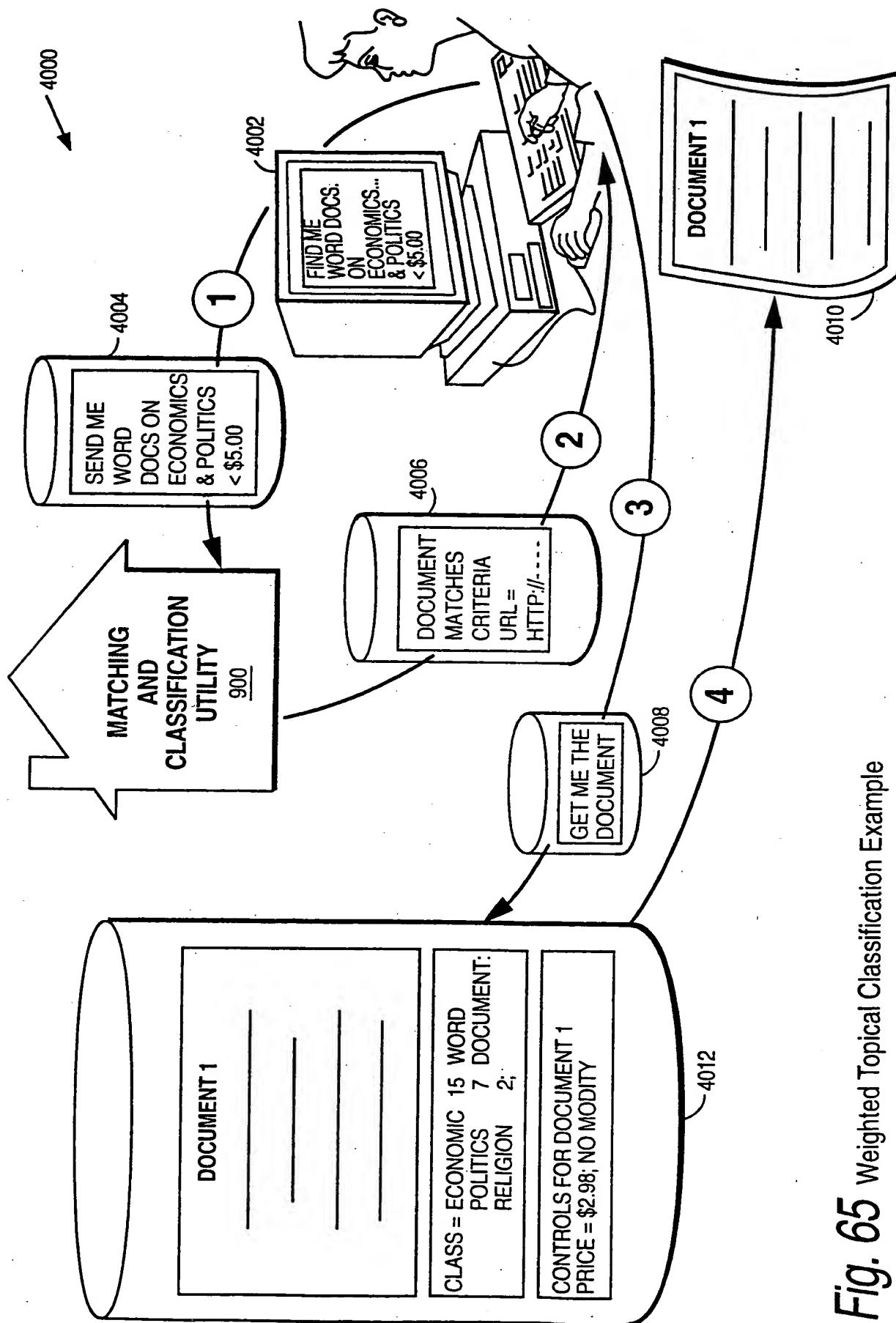


Fig. 65 Weighted Topical Classification Example

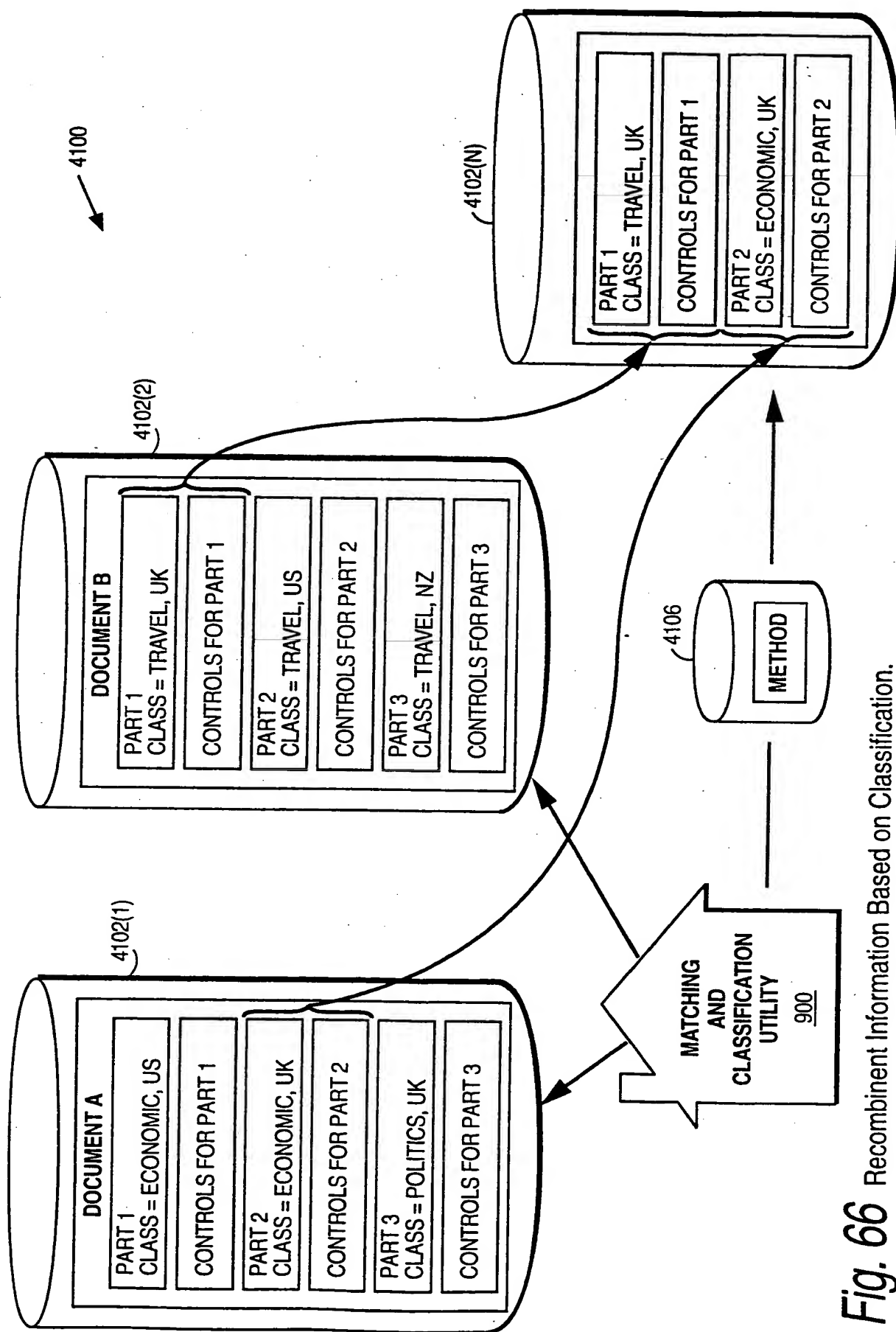


Fig. 66 Recombinant Information Based on Classification.

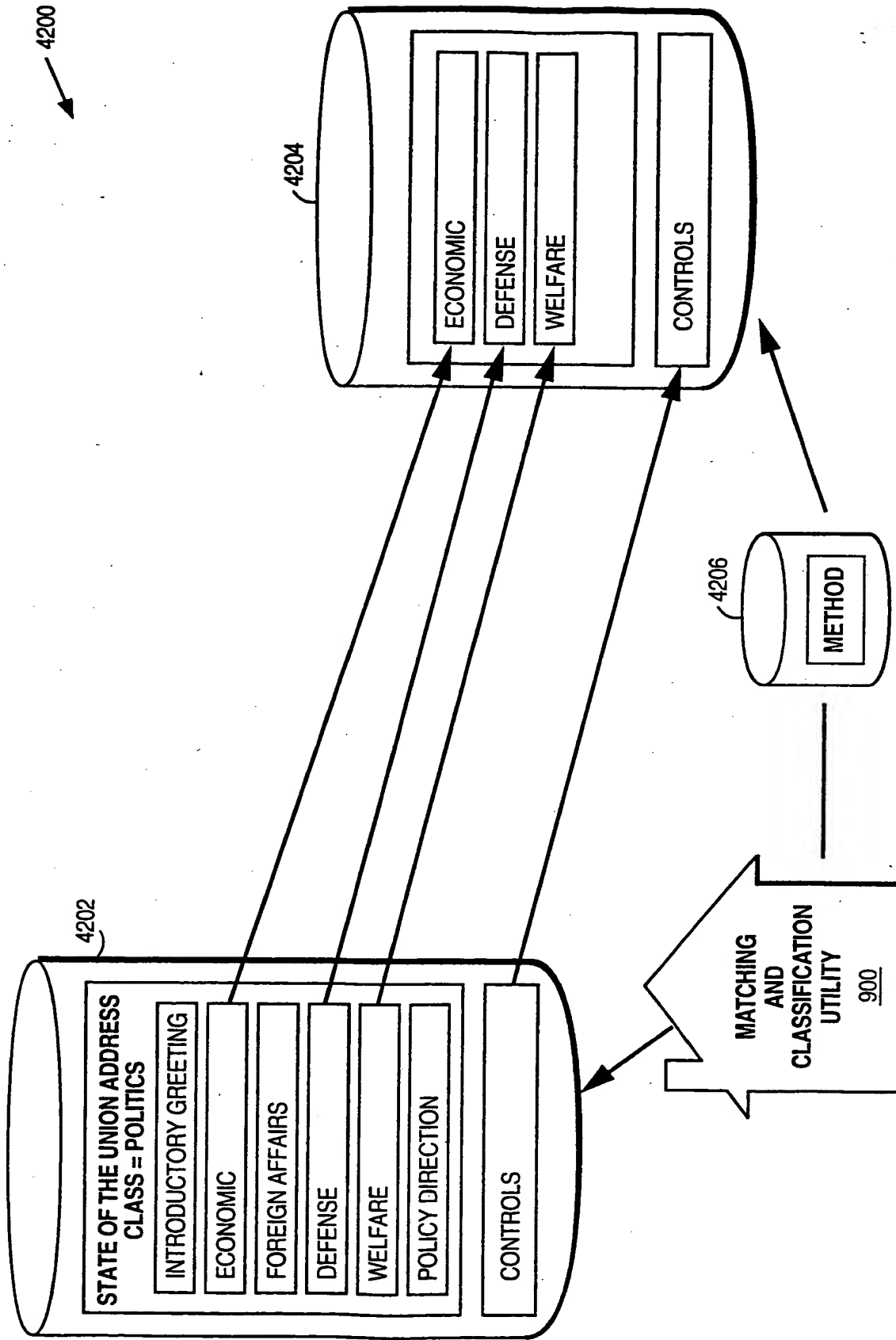
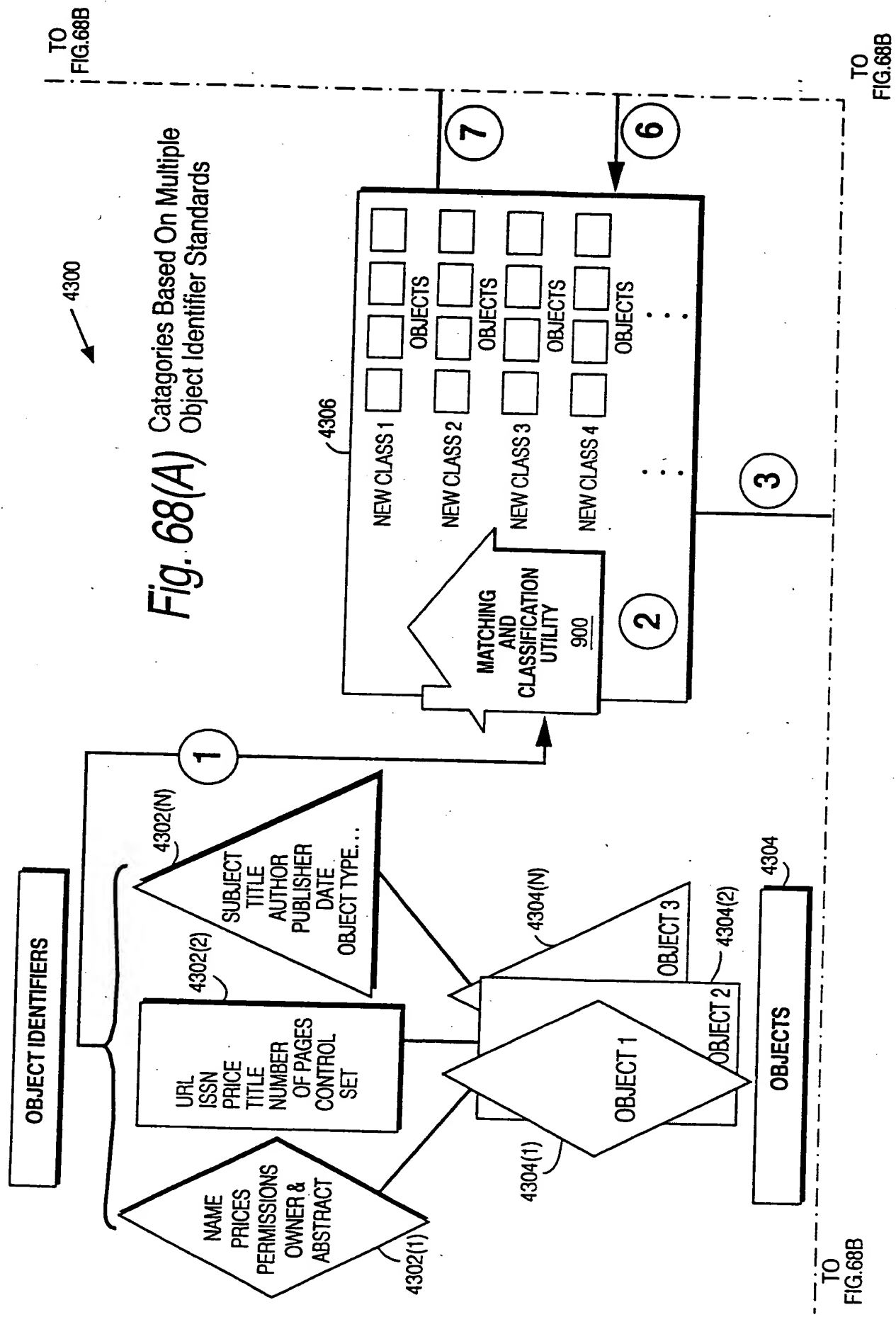


Fig. 67 Nested Classification.

000020 69286160

APPROVED	O.G. FIG.	
BY	CLASS	SUBCLASS
DRAFTSMAN		



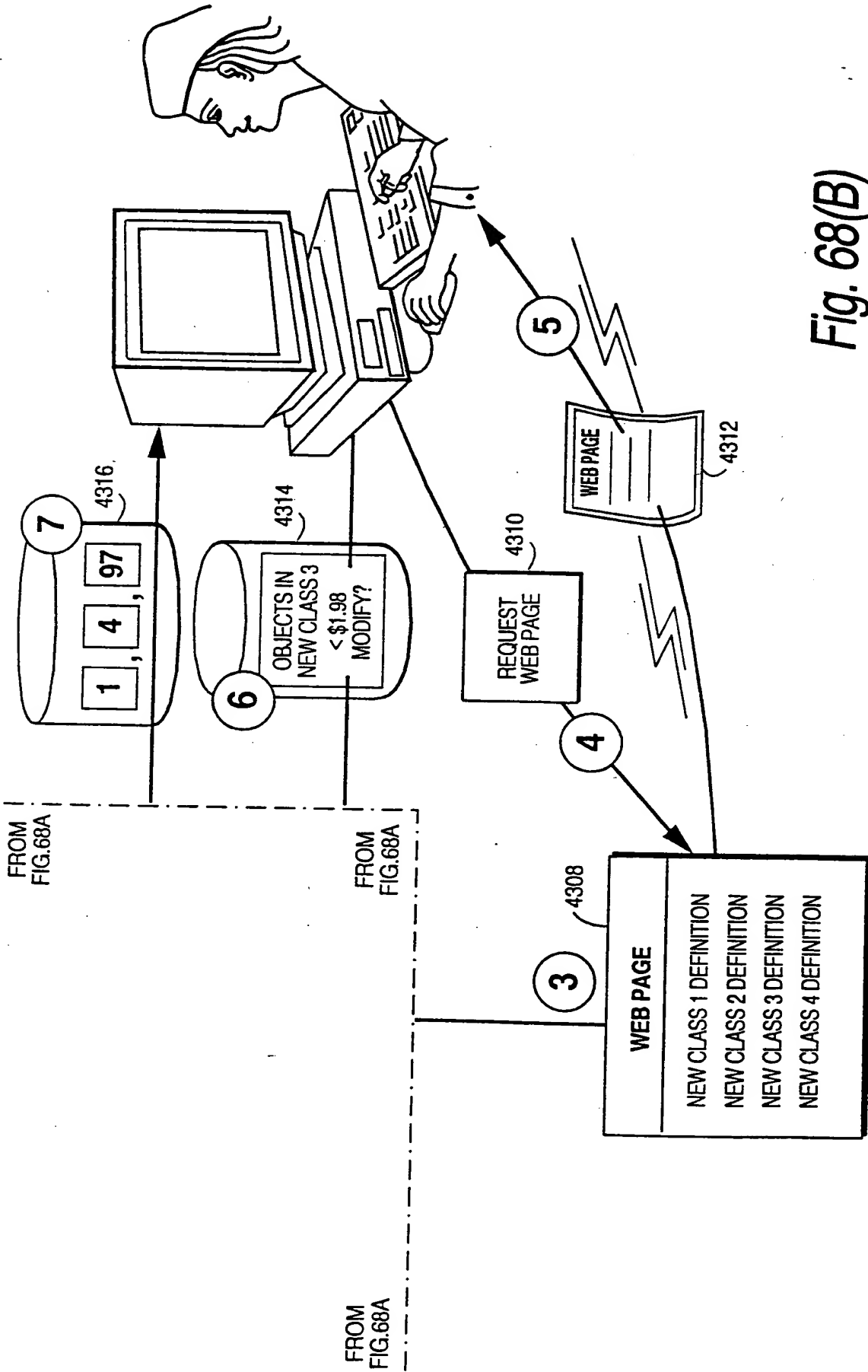


Fig. 68(B)

000000-69666600

APPROVED	C.G. FIG.	
BY	CLASS	SUBCLASS
DRAFTSMAN		

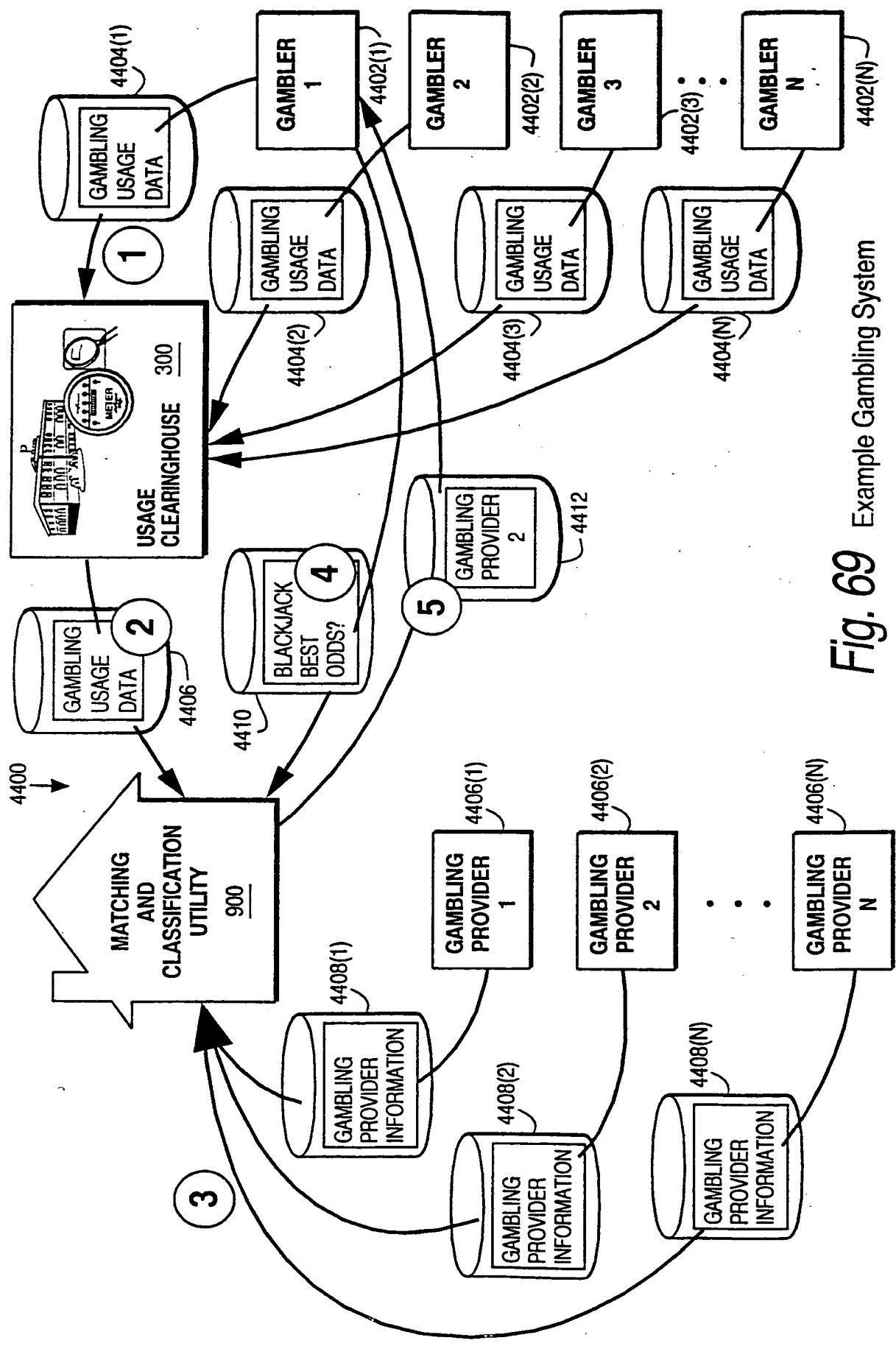


Fig. 69 Example Gambling System

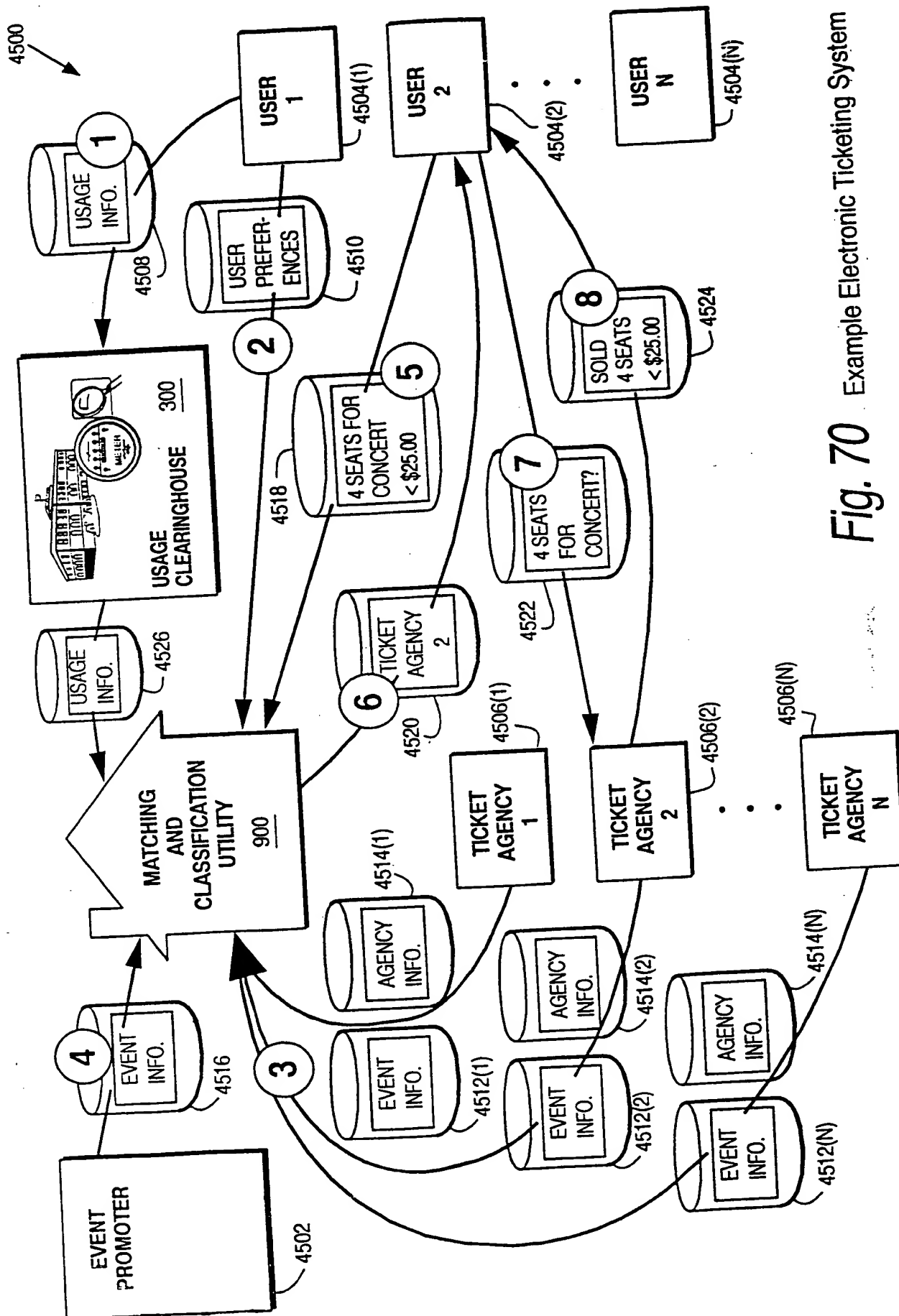


Fig. 70 Example Electronic Ticketing System